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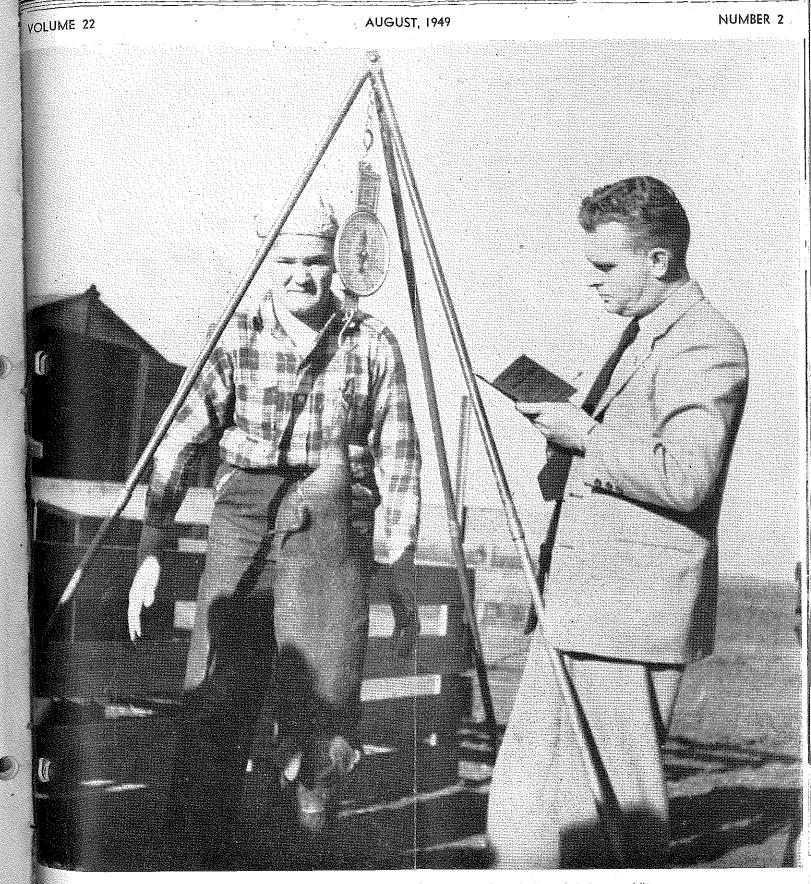
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Robert Howey, teacher, Newark, Illinois, and Stanley Nelson, student, check weights of pigs and litters which are managed cooperatively by Stanley and his father. (Photograph by George Deyce, Illinois).

The Agricultural Education Magazine



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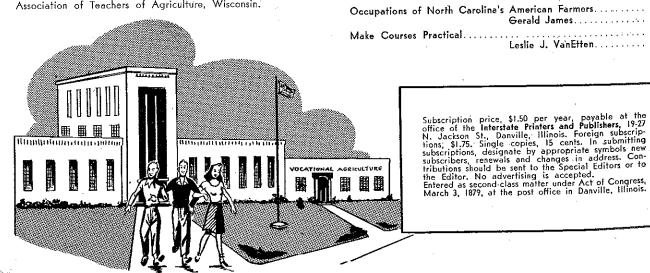
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THE AGRICULTURAL EDUCATION MAGAZINE, August, 1949

Editorial Comment

The other fellow

 $F_{
m day}^{
m ARM}$ families of America solve complex problems each day with free aid from agricultural experts. We the people, believing in the importance of agriculture have established and continue, to finance a number of agencies serving agricultural interests. Overlapping in service and lack of clarity in function resulted as new services were added and old ones expanded. The seriousness of the problem is revealed in the proposal for a unification of services. We must study the proposed changes carefully.

The prospect of change does not limit the present responsibility for teachers of agriculture. They must continue and increase active cooperation with other services in the local community. As has been demonstrated considerable coordination of effort can be achieved without sacrificing identity. In this issue we have focused attention on examples of fruitful cooperation between agencies and institutions serving

The job of providing technical and professional services is increasingly important. A new generation of farm families mans the land of America. Modern farming has made phenomenal advances in its mechanical and technological phases. Under pressure of the new conditions there can be no diminuation of service and leadership rendered by professional personnel. There is need within the ranks for dcveloping appreciation and respect for the work being performed by other professional workers in agriculture.

Let's examine some of the clements in the problem. In simple terms they are the other fellow and our work with him. What is the other fellow doing? Whether it be rural electrification, promotion of greener pastures, development of farm and home planning or terracing, he is working with some of the same farm families that we serve. This other fellow usually turns out to be a good Joe. We even mix with him socially. Both of us want to make good. He is professional and so are we. He is trying to do a job for farm people—for American agriculture just like we are. It is a common job and a big one that we and the other fellow have tackled.

How can we work with him to insure the greatest gains for Farmer Jones, Bill Smith, The James Family, for Westerly Community?

We Have Much In Common

Lct's get to meet him-to know him as an individual. All this talk about big agencies and organizations serving farm families can be forgotten. Out where we work it's only this other fellow. Quite likely he is little different from us. Maybe he even drives a prewar flivver. Probably his wife also thinks that he spends too many nights on the job.

He has problems. Some are as like ours as the proverbial two peas. Before those tough ones come up perhaps some sure-fire items of mutual interest merit attention-say a family outing, a fishing trip, or a game of golf. Good fellowship will give each a sense of confidence in the other. Before long it is just two "boys" from the State University bragging about their accomplishments and cussing at their failures. Good progress has been made at this stage. Each is gaining an understanding of the work of the other.

Major differences will be found in the nature of the activities. To some extent the variations in activities are conditioned by factors beyond the immediate control of either. When possible, activities can be made complementary. One part may be that of creating some interest for a soil conservation district through an evening school or following-up on a single father-son partnership meeting with an on-going young farmer class. In either case we have worked with the other fellow in a cooperative way. We have minimized the possibility of friction and jealousy. We have taken steps to cooperate in performing essential leadership for agriculture. We have taken steps to coordinate effort in doing the job.

Farming programs and establishment



C. L. Angerer

 ${f E}_{
m Agricultural}^{
m DUCATION}$ should show results. In sults may be measured by the number of boys and young men who are becoming satisfactorily established in farming.

It is recognized and accepted that supervised farming programs are central in all instructional programs. Vocational agriculture is therefore most effective when it provides for desirable participation in the important aspects of farming. The real motive for learning is largely the anticipation of the results which may be realized from the learning. Results to a boy must be satisfying, and the

number of satisfactory experiences he receives must increase if he is to make progress in becoming established in farming, Each student measures his progress in terms of what he has accomplished. If he has hogs and has saved a high per cent of the pig crop, has been able to produce a hundred pounds of pork economically, and has marketed his litter at the seasonal peak in prices, these successes will motivate him onward. Later, in the junior or senior year, he will measure his progress in terms of the livestock accumulated, acres in crops planted, bushels of grain or fruit harvested, or cash in the bank or invested in farming. After he has been out of school he will measure his accomplishments in these terms: land rented or owned, farming for himself, a flock or herd established, his first purebred sire, a home, and other similar

Former Oklahoma Students and Their Establishment

A study made of forty departments in Oklahoma of four hundred young men who had Vocational Agriculture in high school and are now farming reveals some interesting information with regard to the ways they are becoming established.

The departments were selected on the basis of number of years established and their location in the major type of farming areas in this State. The teachers in these departments were sent a preliminary survey for recording the names of all of the young men farming in the community or elsewhere who had vocational agriculture in high school. Visits were then made to each department and ten representative indiviuals were selected for making a detailed study of how they were becoming established.

A summary of the studies made of these four hundred young men shows that:

(1) Over 90 per cent remained in the same community or are farming in a similar type of farming area as was found on their home farm.

(2) The largest number of young men are now farming where the opportunities for farming are the best in Oklahoma.

(3) Approximately 80 per cent of the young men now farming had 3-4 years in vocational agriculture, approximately 15 per cent had 2 years, and 5 per cent had only one year.

(4) Even in similar major type of farming areas in the state, some teachers had succeeded in assisting a much larger number of young men to become established than others, even where departments had been established the same number of years. In other words, the studies showed a variation in the abilities of the instructor to assist young men to become established.

(5) When the local teacher had insisted that certain enterprises be included in farming programs which were not of importance in the community, these enterprises were later dropped by the young man after he left school or if the teacher left the school.

(Continued on Page 43)

Vocational education's contribution* to the development of life adjustment education programs in the nation's public schools

R. W. GREGORY, Assistant Commissioner for Vocational Education, U. S. Office of Education, Washington, D. C.

FOR MILLIONS of years mankind has been struggling to live better. The spectre of starvation has always been a real thing to him and in large areas of the globe still is his chief fear. Never has he had enough of the things necessary for good living.

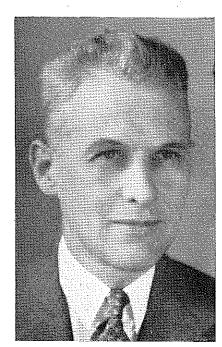
We in this country may have been lulled into a false sense of security by our apparent plenty; even at times being very greatly disturbed by what seemed mounting surpluses. But with great population increases and with the world made mobile we cannot be too certain but that the envy in the hungry eyes of starving people from everywhere may eventually reach out to share some of our advantages. Our best protection of the things we have and hold dear comes finally through our ability to share,-share in the sense of willingness to help everyone everywhere acquire the indispensable requisite for helping themselves.

If that be true, world-wide, then certainly it becomes axiomatic here in our own country among our own people. I am certain that that is what Dr. Charles Prosser had in mind when he presented to leaders in vocational education what has now come to be known as the Prosser Resolution, He recognized that at best the public schools had done too little for too many in spite of the very fine service that had been rendered minor segments of the population. Twothirds of our boys and girls, finding no educational satisfactions or challenges in the public school offering, had deserted its rank of followers and had forsaken its deals. He recognized that relatively they might come to represent an envious hungry world and that our great concern should be to protect the democratic good life by making it serve their needs to the end that they too share fully of its goodness. That to me is the underlying principle of the Life Adjustment Education Program, growing out of the Prosser Resolution. Men and women everywhere, from the banks of the St. John to the Gulf of Mexico, from the teeming east side of New York City to the wide open plains of Montana, from the warm sands of Florida to the cool embracing breezes of Western Washington, shall have made available to them the techniques and understandings they need for a richer and fuller life; their families and their neighbors shall be ever increasingly found to be thoroughly independent and capable individuals who sense and practice the broader opportunity for living by constantly adjusting their own independence of action to the rights and

needs of others so that all may live well. Let that be our concept. May we analyze the opportunities inherent in vocational education for making a contribution to its realization.

*Statement made by Dr. R. W. Gregory, Assistant Commissioner for Vocational Education, before the several Regional Conferences of Agricultural workers, March-May, 1949.

In the first place, we can have only what we produce; individually and collectively, if eating better means for many eating more, then it is possible only as more is made available that is fit to eat. If freedom from drudgery is to be made real for greater numbers of working people it can be done so only as enough of the labor saving devices and implements are produced to go around. What I am about to say is that the central contribution that vocational education can and must make to life adjustment education is to the absolutely certain development of the occupational competencies among our working people that make such production, distribution, and use possible. As never before, we in vocational education shall have to be certain that the education and training



R. W. Gregory

for which we have great responsibility culminates in the skills and ability to grow, produce, and distribute in quantity and kind the things that spell out good living for all.

Each incompetent effort denies the realization of that goal either by keeping the desired product absolutely unavailable, or available at too great cost for wide distribution. Each defective gear resulting from an incompetent hand, each lost pig resulting from a poor judgment on the part of the farmer, each home frustration that sends a workman away to his daily task sick in mind and heart, each wasted lot of merchandise on the shelves of the retailer, all add to the final cost of what finally is available to the consumer. It does not take too much imagination to know that as costs rise, fewer and fewer people are able to afford the things desired. Therefore, as never before, voca-

tional education stands or falls, succeeds. or fails in its efforts to serve, according to the degree of competency resulting among workers being served by it.

Vocational education's first further contribution to the development of life adjustment education programs in the nation's public schools, should be made in its own areas of responsibility. May I suggest three such opportunities.

Increased occupational efficiency may be expected of individuals trained in vocational education to the extent that vocational schools are enabled to do a more efficient job of selection and enrollment of individuals in vocational courses. Not only will it be possible for the instruction that is given to a more highly select group to be more effective. but likewise it will probably represent the first real step taken in life adjustment education for boys and girls for whom enrollment in such a vocational course has been deemed inappropriate.

In the second place, as the vocational schools are able to provide not only the kinds of education and training that make for occupational competency among its members, but also as these schools either provide or encourage the general school to provide education and training related to other important life activity areas, it will be said that such schools will be making a direct and definite contribution to the broader life adjustment needs of their own pupils.

Finally, vocational schools will make a rich contribution to life adjustment education by insisting upon a maintenance of standards in vocational courses that begets occupational competency and refuses to be diverted from this central purpose by allowing such a vocational course to be engineered into the best general education in the local school and thereby used as a life adjustment education program for numerous boys and girls.

This is all by way of saying that vocational education's first and chief contribution to the life adjustment education concept is to reaffirm and validate its possibilities with respect to its original and central purposes of providing an opportunity for education and training programs that lead to occupational combetency; and at the same time be perfectly willing to broaden its concept of what it means for the individual citizen to be occupationally competent by realizing the importance of his competencies in closely related life activity

Vocational education has succeeded and in its success can be found certain attributes, characteristics, and procedural techniques which hold promise for the enrichment of any educational effort pointed specifically toward life adjustment outcomes.

Individual Pupil Differences Based Program

1. Vocational education has been built largely around the validity and concept

of individual differences. It has recognized from the beginning the necessity for studying and analyzing the needs, characteristics, environment, and other like factors that impinge upon the ability of the individual to respond to occupational stimuli. It not only recognized the fact of individual differences but it has acted upon them in building its program of instruction. If a life adjustment education program is to become meaningful to a large proportion of our secondary school pupils, it can do so only to the extent that it too recognizes and acts upon the characteristic differences of the pupils whom it would

THE AGRICULTURAL EDUCATION WAGAZINE, August, 1979

High Pupil Motivation

2. One of the primary factors that has been foundational to the success of vocational education has been the motivation of each student enrolled, Boys and girls learn most easily and certainly when they are ready to learn and one of the chief factors influencing readiness is motivation. They are motivated by the fact that they may share in the economic and social outcomes of the educational activity in which they are engaging; and finally they are motivated by the very simple fact that they are engaged in a program of educational activities, built upon the dominant and central characteristics of their specific individualities.

To the extent that life activity areas other than the occupational are able to develop motivation on the part of students to be inquisitive with respect to them, to desire information and knowledge of them, and to be anxious and willing to participate in them, may we finally come to find such life activity. areas really functioning as educational opportunities for ever greater numbers of boys and girls in our secondary schools.

Instruction Project Centered

3. Vocational education has been known from the beginning, among schoolmen and even among laymen, as the educational program centered in the project concept. Much of the learning resulting from vocational education instruction centers around the development of a real life activity project. The student in agriculture grows a pig; the girl in home economics redecorates a room and in doing so each faces real problems to which have to be applied sound reasoning and upon which must be brought to bear scientific fact and evidence. There is an objectivity surrounding the whole activity that makes for interest and presents a challenge that leads to desirable educational outcomes. Certainly there are to be found in every community life-activities which can be utilized as projects for teaching boys and girls how to respond to and participate in their many stimulating situations; with a resulting life adjustment education process the same high order as now characterizes vocational education.

Individual and Group Student Responsibility 4. Students enrolled in vocational schools and classes being treated as individuals begin to develop a high sense (Continued on Page 43)

S. S. SUTHERLAND B. C. LAWSON Working together on farm problems BERT L. BROWN, Supervisor, Pullman, Washington

Professional

THERE are a number of governmental furnishings, and the family food budget. agencies, both state and federal, which are set up to assist the farmer. Each has its own field, its own program, and methods for assisting the farmer. Each agency is set up to do a specific job. Each agency has a part to play in the development of the farm and home plans of the farmer constituents. There is more work to do than all of us will get done even by working together. We must work together to get as much done for the good of the farmer as possible.

Everyone Pitches In To Help Veteran There is always a way of cooperating, of working together, if the parties con-

cerned are willing. Here I should like

to cite an example of an instance where a number of agricultural agencies worked together for the good of a farmer. Early last fall, at a state agricultural council meeting, we were taken out to the farm of a young veteran on the new Roza irrigation project in the Yakima Valley. That afternoon we just happened to be the guests of the Farm and Home Administration. This particular veteran was one of the young men who had been lucky enough to get one of the better homesteads in the special drawing. A number of farm agencies had been called in to help in getting this veteran established in farming. The agencies had worked out a farm and home plan for the development of the farm. The Agricultural Extension Service gave advice and assistance in working out the cultural and cropping system to take advantage of a specially developed market. R. E. A. brought to this farm and the district the advantages and comforts of electric light and power. The Reclamation Service and the S.C.S. helped with the farm engineering, the field layout, leveling, and layout of the laterals and irrigation system, F.H.A. had given assistance with one loan, a domestic water facilities loan for the development of water for home and livestock. Since the farm and home plan called for the ultimate development of this particular farm into a poultry breeding and commercial hatchery establishment (this veteran is a graduate of Utah Agricultural College in poultry husbandry). the F.H.A. was considering a second loan, a farm loan for buildings and other improvements. Production Marketing Administration had given help with a phosphate program on the alfalfa land, which was being harvested. The veteran and his young wife were members of the Grange. The wife had received help from the Home Demonstration Agent in the planning of the farm home,

An ample supply of canned fruit, vegetables and meat had been out up at the school community cannery in Toppenish under the direction of the Toppenish department of vocational agriculture. The veteran was enrolled at Sunnyside in the Institutional On-the-Farm Training program, where he was receiving 200 hours of classroom work per year in general irrigation farming, especially directed towards the problems of the novice irrigation farmer, and the value of at least 24 home farm visits by Sunnyside's two teachers of vocational agriculture. It was indeed gratifying to see what could be accomplished when we all work together for the good of the farmer.

Individual Initiative Maintained

We are sometimes criticized. We have all heard it said that there are too many agricultural agencies, both state and federal; that someone must be wrong, for we carry different recommendations to the farmer; that we do everything for the farmer, leaving him nothing to do for himself; that we take away individual initiative and discourage the ambitious (I should like to remind you that the veteran and wife had built their home, block by block, from pumice block, and that \$20 for some inside finish carpenter work was the cash outlay for labor); and that there is too much duplication. We are not criticized on the score of duplication when the agencies get together and, with the farmer, decide on the needs of the farmer, formulate a program based on his needs, and jointly carry out the program. Remember, this was done in the case of the G.I. on the Roza project. When we go ahead and do our specific jobs as part of an overall plan for the good of the farmer, there isn't any

Five Key Points

- I fully believe there are five thing we should do:
- 1. We should provide a common meeting ground for developing an understanding of the objectives of each agency.
- 2. We should adapt and adopt programs to meet the needs of the farmer. He should be consulted as to his needs.
- 3. We should promote a unity of effort.
- 4. We should coordinate the programs of the various agencies.
- 5. We should be less zealous of our own fields and successes and less jealous of the fields and successes of others.

Cooperating with other agencies in a veterans program

C. B. DAVENPORT, Teacher, Mt. Holly, New Jersey

BEFORE discussing what I believe to be a very effective method of using all available farm agencies in the training program perhaps it might be well to describe the way we have orgainzed our program locally.

In New Jersey the veterans' farm training program was dropped into the laps of the regular instructors of vocational agriculture. It was largely a parttime job for the regular teacher, added to his regular teaching load. The time at the disposal of the teacher for such work was limited naturally.

There are six departments in our county, which is a highly diversified agricultural area. Our schools are relatively close together but the types of agriculture found in the various areas differ greatly.

The plan of the program was to have the instructor who did the classroom teaching handle the instruction on the farm. The first group which came to me at the start of the program was composed as follows: three dairymen, two poultrymen, one greenhouse employee, one working for a nurseryman, two who had only sweet corn and peaches in the light soil section along the Delaware River, a blueberry grower, a worker on a cranberry bog, and several on general farms. Perhaps some might feel equal to the task of attempting class instruction for a group of this kind but I felt that I could hardly qualify, and do the best kind of job. Since the other instructors in the county were faced with a rather similar problem we decided to get together, pool our efforts, have the group meet in one school and divide the work so that we could specialize a little to do a more effective

We decided that the groups of major interest could be divided about as follows: dairy, poultry, fruit, general farming, and a combined blueberry and cranberry group. The most competent instructor available in each field was assigned to the class instruction in that classification. Here began our first use of outside agencies. It was felt that the County Agent was by far the person best equipped to teach the fruit group and, he accepted the assignment. A dairy breed fieldman who was a former county agent and instructor of vocational agriculture was chosen to teach the dairy group. To the writer fell the job of administration because it was conducted in his school.

Since the State Department allowed us to spend no more than twelve hours per week, it was imperative that we secure additional help. It seemed to us that since we had competent class instructors, if we could secure the services of some retired, successful farmers to attend the classes and do most of the on-farm instruction, we could have about the ideal combination; good sound class teaching combined with practical instruction on-the-farm by experienced

farmers. In addition to these men we have added to our staff, as part-time helpers, a soil conservationist, a canhouse field man, and others who have brought a wealth of experience to the program.

Since the 275 veterans now in our program come from four counties we have a class meeting only one night a week. Some of them travel forty miles to get to school and we feel that 80 miles a week is enough to ask them to drive. So our classes are held four hours every Tuesday evening. During the first half of the evening we have a general meeting of the whole group in the school auditorium, and after a short break, the group divides into classes of their respective interests.

It is in this general meeting that we have secured wonderful cooperation with other agricultural agencies in bringing to the whole group information of value to all of them, regardless of their type of farming. During the

summer we plan our meetings for the year so that we can schedule our speakers well in advance of the date they are to appear. We attempt to devote a month to each topic selected as being important in the training of all of the veterans.

Each fall we devote the month of September to giving the group a picture of the various types of farms in the area. We select an outstanding dairy farm, poultry farm, fruit farm and truck farm, and meet for one evening meeting on each of these farms. On the evening we are visiting the dairy farm, for example, leading dairymen and specialists discuss various phases of the business, its opportunities and difficulties. We use this opportunity to give the veterans an over-all picture of various types of farming.

In October, as the school is getting underway for the winter, the Dean of the Agricultural College, the State Secretary of Agriculture, the President of the State Farm Bureau, and the Master of the State Grange discuss problems facing farmers and the part their organizations are playing in meeting these problems.

Another month is devoted to financ-(Continued on Page 42)

Farmer Classes

J. N. WEISS MARK NICHOLS

Twelve years of farmer education

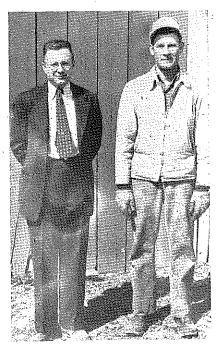
E. R. BORST, Teacher, Fort Recovery, Ohio

IF IN THE study of history you have read about the Indians massacring the troops of General St. Clair and then a General by the name of Mad Anthony Wayne coming along and recovering that territory from the Indians, then you have read about Fort Recovery, Ohio. I have been in this community for twelve years, with the exception of four years out for the war.

I like to think of my program as a continuous program as the boys pass through vocational agriculture classes and into the Young Farmer and Adult classes. While the boy is in school we deal with problems on a smaller scale, such as getting the boy to obtain one good heifer calf and also to keep accurate records on the home herd to enable him to understand some of the herd problems. In the adult group there is a better opportunity of presenting an over all picture of the topic, and talk in terms of dollars and cents in relation to their farm set up. As a result of this, some farmers have bought better bulls and even replaced their entire herds with better cattle.

The first big problem in adult education, as I see it, is to sell yourself to the community. If the people do not believe in the instructor, his work is uphill business and there is a great possibility that he will not succeed. Here is an example of how it worked. In 1937

swine was the main livestock enterprise. Even though hogs were not best for the community, it would have been disastrous for a new teacher to come into this community and tell the farm-



A Winning Team—E, R. Borst and Young Farmer

ers they were all wrong on their type of livestock. Since there was a great amount of interest in hogs it was decided to capitalize on the fact by offering a short course on swine production to any one who wanted to attend. There was much that could be improved. using this series of meetings as a method of becoming better acquainted with the farmers and selling them on the adult education program, I found the young men and the older farmers had different problems. From that year on separate courses were offered for the different age groups. At that time I decided more could be accomplished with the young men. During these years several dairy and related courses had been conducted and results were being obtained.

In 1940-41 the attendance of the young farmers was an average of 29 per meeting, which is very good for this territory. Another young farmer class was held in 1941-42 but due to the war that was my last class until last year.

In the files is kept a list of the young men who live on farms even though they may now be working in a factory. At the beginning of each school year this list is corrected by the boys in the day classes. A notice of the first meeting date and the purpose of the meeting, usually organization and planning the course topics, is mimeographed and sent to every young man on the list. Also at this time an article describing the course is printed in the local paper inviting the men to attend our meetings. Whenever possible a personal call is made especially on those who are leaders in the community. If some of the members begin missing a few meetings they are sent a printed notice of the topic of the next meeting and are invited to start attending again.

In preparing for the class I find it takes from one to four hours, depending upon the subject to be presented and the type of work to be done that evening. The amount of preparation should be sufficient to give the instructor more than enough material to be used in one meeting. Hence the instructor will not have a tendency to drag and draw out material and be afraid of running out of something to do.

In the teaching of a class there is nothing in my opinion that will take the place of a good demonstration. At one of our large meetings, which was held in the gymnasium, we had a Guernsey cow in a stanchion and 3 calves in a pen on the floor of the gym. More good cattle points were shown and discussed at that meeting than any other I have ever seen. This was about 10 years ago, but it is surprising how the farmers remember that meeting. Another time I invited the local veterinary to speak on internal parasites in swinc. In order to make this more interesting I found a pig that I thought was dying from worms. This pig was brought into the agriculture room and the doctor opened this pig there on a table before those men. I am sure those men saw a condition in that hog that they had never seen before nor did they realize it could happen to their hogs. I feel they will not soon forget that lesson. There are on this farm.

many other examples I could use such as the excellent aid given by one of our local milk plants, the opening of 21 sick chickens at one meeting, and a demonstration of different grades of gasoline and oils.

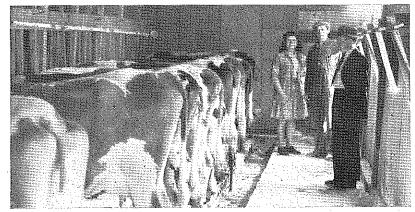
How successful are these meetings of the adult education classes? I do not know. There are results that can be pointed to, but there may be other smaller ones that we will never hear about nor ever see. There are ways of measuring the success such as attendance at the meetings, the number of improved practices each member says that he will try within the next year, and by the actual change that takes place on farms over a ten year period. The latter is by far the most accurate measure but the most difficult to report.

There are farmers in this community that have changed their methods of farming to a drastic degree through the influence of adult education. Here is how agricultural education should work in my opinion. In 1937, a junior boy quit school. Through the persuasion of the coach and myself the boy came back to school and eventually graduated. During that time the boy became interested in better dairy cattle. However, his parents did not have money enough to buy better stock. A man in the community learned of the boy's needs and offered to finance the purchase of a couple of good cows for him, This offer was accepted and the three of us found two purebred Guernseys which were bought. After graduating from school this young man regularly attended the short course meetings and his father missed very few of the adult meetings for the older men. From this start the dairy herd continued to improve.

There are other examples in this community that could be used such as selling three men on the idea of better dairy sires. These men pooled their cash and purchased an excellent bull. This helped lead one of these men to change from a very poor herd to one of the best purebred Guernsey herds in this community. It happened within 11 years. Another young man has changed his herd from a poor grade of cattle to a high producing herd of grades and purebred Ayrshires and introduced much better methods of farming and feeding. This young man claims it all came about through what he learned during the two years in vocational agriculture, and help through the adult education classes.

While in the Navy I had an opportunity to observe many young men and a chance to think about some of the problems that were presented to me by members of my crews. I came to the conclusion that too many of us were trying to care for what we thought were the most pressing problems of the young men-technical information. It has been a generally recommended and accepted procedure to try to make a young man successfully situated in farming by offering courses consisting of 15 or more sessions in dairying, 15 or more in swine and 15 or more in other technical subjects. I believe this to be absolutely false reasoning.

The year 1947-48 was our first adult farmer class since the war. At that time an organization was set up and officers elected. Using a questionnaire consisting of about 300 questions, similar to that developed by Dr. Bender of Ohio State University, it was found that young men were far more concerned with, and had problems more important to them, such



Farmer education involves the farm family

The house has been rebuilt, the young man has married and has two fine children. The mortgage has been paid, a new silo built, the barn greatly improved, equipment added to care for the milk to keep it Grade A, for which they are now receiving double the price received for milk to be processed. A bath and furnace have been added to the house and they are driving new cars. All this did not come directly through adult education but through vocational agriculture and adult education there seems to have been a stimulant added that was needed for the improvements that have been made on this farm.

as getting along with other people and learning the proper social graces. Many of the young men indicated that they did not know how to become acquainted with other people, especially the opposite sex. They were not sure of themselves.

We set up our program of technical subjects, then we added through the winter some other events. One of the first added events enabled twenty-five of the men to go to a neighboring town and take dancing lessons. Going as a group there was far less embarrassment. After several dancing lessons there were three dances arranged in the school gym. There were also other forms of recreational continued on Page 42)

Securing effective cooperation of local school administrators for vocational agriculture

S. D. McMILLEN, Assistant Supervisor, Charleston, West Virginia



S. D. McMillen

DURING the started during the present school year. past thirty vears much has been accomplished in developing a complete program of vocational agriculture and in securing the necescooperation support of and school offilocal cials. In the administration of the program, we are

still far from the goal we must reach if we expect a complete program of vocational agriculture to be accepted as a functional part of the school cur-

Local school administrators usually obtain their experiences with vocational agriculture in their own school systems or by the observation of a department in their communities. Very few have had any specific training in the organization, administration or supervision of vocational agriculture during their college

Past experiences have proved that many of our administrators have a very fine understanding and cooperative attitude toward the development of a total vocational agriculture program in the community. Unfortunately, all administrators do not have this understanding.

The supervisory and teacher training staffs in West Virginia recognize their responsibility in securing the effective cooperation of school administrators for vocational agriculture in all of our departments and have been working on a "plan of action" to create a better understanding of the needs in the community.

This plan is as follows:

1. Provide qualified instructors that have received training and participating experiences in conducting all phases of vocational agriculture.

2. Develop an in-service training program for all teachers that will provide the experiences not acquired in their college training.

3. Work closely with all teachers and local administrators in the further development of their departments.

4. Attend and participate in the conferences of principals and superintendents.

5. Counsel individually with local school administrators.

6. Hold county or district conferences of school administrators and teachers to discuss the local program of vocational agriculture.

The first five points of the program have been in operation for several years. However, the plan of bringing the school administrators, teachers, and supervisors together in a county or district conference to discuss the mutual problems and develop a better understanding of the total program, was purpose of the conference. The state supervisor of vocational agriculture explained the total program of vocational agriculture in the secondary schools and the progress that has been made in West Virginia.

The general discussion produced the following questions for further consideration:

1. Should the adult program for outof-school groups be considered as a part of the local school program? 2. What should the school emphasize

in its curriculum?.

3. The hourly requirement for vocational agriculture classes.

4. The size of the vocational agriculture classes.

What credit should be given for vocational agriculture? 6. Should students be given credit

when they graduate at mid-year? School activities in which the

teacher should participate. 8. Relationships between the department of vocational agriculture and other departments in the school.

Should the teacher of vocational

Supervision LANO BARRON

Program

An agricultural county having four

departments of vocational agriculture

was selected for the experiment. The

county superintendent of schools was

contacted and his cooperation secured

The superintendent of schools invited

all high school principals and teachers

of vocational agriculture to attend a

dinner conference with the supervisors

of vocational agriculture. The meeting

was scheduled in one of the county high

schools with the dinner served by the

A tentative program was arranged

which would allow ample time to be

spent on problems of the local adminis-

home economics department.

trators and teachers.

in trying out the plan in his county.

GLENN DOWDY, County Superintendent of Schools, Chairman

7:00 P.M.—Dinner (Home Economics Department)

8:00 P.M.—Tour of the school community food preservation center, home economics department and department of vocational agriculture.

8:15 P.M.-Round table discussion of the total program in vocational agriculture.

a. The agricultural education program in secondary

b. Problems of conducting the program of vocational agriculture on the local level. Problems to be raised by administrators, teachers and supervisors for discussion.

c. Summary and conclusion. The conference was attended by the county superintendent of schools, four principals and four teachers of vocational agriculture, one principal where vocational agriculture was not offered, the state supervisor, assistant state supervisor and the district supervisor in

this area. The dinner meeting served as a means of getting acquainted and provided the fellowship essential to better understanding among all individuals present. The dinner was served in the home economics department. Each individual paid for his own meal. After the dinner, the principal and teacher conducted the group on a tour of the home economics department, school community food preservation center, and department of vocational agriculture. The discussion which followed was held in the vocational agriculture classroom.

The county superintendent of schools acted as chairman and explained the agriculture be permitted to leave the community to attend teachers' meetings, agricultural meetings and similar activities?

10. What should be the responsibility of the school toward the institutional on-farm training program for veterans? Should teachers of vocational agri-

culture be paid more than the other teachers in the high school? 12. Why should the F.F.A. sponsor

public speaking contests and athletic events when the high school already provides these programs for all students?

Should the teachers of vocational agriculture be provided with free time in the schedule for conducting an adult program in the community?

Should all farm boys be permitted to take vocational agriculture regardless of the size of the farm?

15. What use could be made of the shops when not being used by the vocational agriculture classes?

A general discussion of the problems listed and others raised by the group brought out the fact that some misunderstanding existed on the part of administrators as to the needs, aims and objectives of vocational agriculture and its place in the school curriculum. The teachers of vocational agriculture were shown why the school administrators were not always able to cooperate in every way with the teachers.

The conclusions summarized by the group indicated that much had been accomplished and that everyone had gained a better understanding and appreciation of the problems related to the establishment, conduct, supervision and administration of a total program of vocational agriculture in the local community.

Cooperating with other agencies on a county level

J. M. CARTER, Teacher, Wellsville, New York

THE AGRICULTURAL EDUCATION MAGAZINE, TIMY WOLL TITE



J. M. Carter

FOR a number of years the Allegany County (N.Y.) teachers of agriculture held regular monthly meetings. Occasionally a farm bureau agent, 4-H club agent, a soil conservation engineer and others would attend a meeting to discuss

some part of their program that was of a particular interest to the teachers. Eventually, these men attended our meetings regularly, and at times the teachers of vocational agriculture were out numbered.

Looking back, we can ask ourselves, how did this desirable situation develop? First, the welcome sign was extended; second, there was a sincere respect for the other fellows program; and third, we all realized that a group of professional men in the field of agriculture could put over a better program by working together with a common pur-

About a year ago at one of our monthly meetings it was unanimously decided to adopt the name, The Allegany County Professional Agriculture Men's Group. This new group was composed of the following: Thirteen teachers of agriculture; one Farm Bureau agent; one assistant Farm Bureau agent; one 4-H club agent; representatives of soil conservation district; the Production and Marketing Administrator; representatives of Farm Credit Administration; secretary of Farm and Home administration; and a representative of Alfred Agriculture and Technical Institute.

The program developed for 1949-1950 is as follows: September-Program planning

October-Rural Electrical Service Orpanizations

November-Planning a Soil Conservation Program for the farm December-County Fair

January-1949 Agriculture Outlook February-Rural Recreation

March-Joint meeting with Cattaraugus County on Farm Credit April-Annual meeting with school

principals and superintendents May-Meeting with Allegany County Bankers Association

June-Annual Picnic

The year's program is probably typical of a good many county groups all over the United States. Each meeting is preceded by a dinner, usually served in one of the school cafeterias. Wives attend the dinner and later enjoy a social evening by themselves.

A business meeting is held before the main program of the evening. At this meeting the teachers of agriculture have

a chance to bring up any business pertaining to their program. In addition, the other men attending have an opportunity to discuss any important phases of their program before the entire group. As a result we all know something about the other fellow's program. This permits cooperation and coordination that would be impossible if we did not have the opportunity to get together at least once a month.

I would like to devote some space to discussing how we teachers in Allegany County benefit from working and cooperating with a few of the other agricultural agencies in the county.

- I. The Soil Conservation Service: We have one of the most active Soil Conservation Districts in the northeastern part of the United States. During the past year the district has:
- A. Provided cash award for the best F.F.A. exhibit at the annual Potato Show.
- B. Conducted contour plowing contest for F.F.A. boys. C. The district engineer arranged
- an all-day field trip to: 1. Illustrate recommended soil
- conservation practices. 2. Demonstrate forestry man-
- agement. 3. Acquaint veterans classes

with conservation measures. Several of the F.F.A. chapters earned money for their treasury by planting trees for the soil conservation district. Besides being profitable, it was a very worth while community service.

II. The Extension Service: A. Farm Burcau: Help of specialists from the New York State College of Agriculture at Cornell University can be secured only through the Farm Bureau or 4-H club agents. Teachers of agriculture are informed at the monthly meetings and by mail of the schedule of meetings to be conducted by specialists. Day classes are welcome and often attend such meetings. We are also on the Farm Bureau mailing list to secure up-to-date

> information. B. 4-H: Personally, I feel that the gap is too wide, and growing wider in some areas, between the vocational agriculture and the 4-H program. As mentioned before, here is an excellent chance to show respect for the other fellow's program. I would like to present some of the ways in which the teacher and the 4-H agent cooperate in our

1. Most teachers act as a local leader for a 4-H club

2. A Junior County Fair is conducted jointly

Calf selection day is held for both 4-H and F.F.A. members.

4. A Junior program makes up a large part of the Allegany-Potter County Potato Show.

5. 4-H agent makes extension specialist help available.

I am sure we shall always have Vocational Agriculture, F.F.A. and 4-H. We should keep in mind that we are working for the good of farm boys in our respective communities. Reaching this objective is of primary importance; under whose banner it is achieved, is of little significance.

I find it a great help to have prospective students start a 4-H project in the seventh grade. By the time they enter the agricultural class they have projects under way and have had some training in leadership.

III. Alfred Agriculture and Technical Institute: We are fortunate in having a State Agriculture and Technical Institute located in our county. A large majority of the instructors are former teachers. The facilities of the institute are open to area schools for field trips and related activities. A livestock judging contest is sponsored by the Animal Husbandry department during February of each year.

We had the unique experience this year of participating for the first time with the F.F.A. boys and their teachers from Potter County, Pennsylvania in a notato show. Potatoes were exhibited, and a judging contest was conducted similiar to the contest of the National Junior Vegetable Growers Association.

I have taught agriculture in two other counties in New York State and I feel that we have a more effective program in Allegany County because of the relationship that exists between the teachers of vocational agriculture and the other professional groups.

I once heard an extension agent state, "most counties have enough trained personnel to put over a program for rural people if they would only work together." This is a challenge. What are we going to do about it?

Social scientists say that, the trend from simple to complex organization of rural society has resulted in or given impetus to two other changes: (a) patterns of participation in community life have tended from family to individual nature, and (b) community wholeness is giving way to community

Citizenship in a democracy involves more than exercising one's voting privileges at the polls. It also means being intelligent about issues of the day, having sound opinions, and being able to work out social adjustments individually and among groups. Democracy rests upon education.

Are you concerned about the program offered in your high school? The article by Dr. Gregory on page 28 should help you to take constructive action. Agricultural education in years past has paved the way for new ideas in rural education, but the pioneering must go on with each new generation. EDITOR

Problems of beginning teachers*

L. J. PHIPPS, Teacher Education, University of Illinois



A the problems of begining teachers is of value in indicating the kinds and types of training needed by prospective teachers. It may show indirectly the competencies which have in the past been developed, neglected, or in-

sufficiently emphasized. The following study was conducted in 1947-48 as a part of a more inclusive study.

Sources of Information

Three procedures were used to obtain evidence concerning the needs and difficulties of beginning teachers. The first procedure was a postal-card survey and service during the first year of teaching. The second means was a visit by a member of the agricultural education staff to each of the schools where the teachers were employed. The third procedure was the use of a questionnaire listing 181 professional activities on which the opinions of the beginning teachers were obtained regarding the adequacy of their preservice training. Problems of Beginning Teachers As Shown

by the Postal Card Survey Each teachers in Illinois who had begun teaching vocational agriculture for the first time in the 1947-48 school year was asked by letter whether he was willing to participate in the study and service. Twenty-six of the twenty-eight beginning teachers agreed to participate. Each teacher cooperating in the study was supplied with postal-card forms on which he could report any difficulties. It was understood that the teacher-training staff would provide assistance in solving the difficulties reported if a teacher desired this service. Eighty-seven postalcards and five letters were received dur-

STUDY of by major areas or jobs in agricultural education. Most of the recognized problems were in the areas of (1) the annual and long-time program, (2) classroom teaching, (3) the Future Farmers.

It is necessary to analyze the difficulties by activities within each area to obtain a picture of the more serious recognized problems. This information is shown in Table II.

"One class has several brilliant students who can accomplish material in one-half of the time it takes others. How should they spend their extra time? "How can you evaluate and place

a grade on a supervised farming program and work it into the semester grade?

"What is the correct procedure to follow in project visitation?

"What are the ways and means of using records of completed projects"

TABLE II.—The Activities In Which Problems Were Recognized By Twenty-Six Beginning Teachers of Vocational Agriculture In Illinois In 1947-48.

Activities by areas	Number of teachers reporting problems	Percentage 100		
Total Teachers	26			
10001 1020Hole	6			
I. Annual and long-time program	_	**		
Planning courses.	15	58		
Budgeting time	5	19		
Stud ing the community	3	12		
Using advisory councils.	2	8		
Planning summer programs	1	. 4		
Figuring summer programs				
II. Classroom teaching		*.		
Using approved teaching procedures	13 ·	46		
Using approved teaching procedures	6 5 	. 23		
Training contest teams. Providing farm-mechanics instruction	5	19		
Providing farm-mechanics instruction	3	12 .		
Classroom management Conducting supervised study		8		
Conducting supervised study	······· ī	4		
Using conference periods	- 1			
'-	45,54			
III. Future Farmers of America	G	35		
Promoting programs of work	9 8	31		
Teaching parliamentary procedure		4		
Training public speakers.		-		
	*			
Supervised farming	8	31		
Developing supervised practice programs		15		
IV. Promoting and using records of farming programs	3	12		
IV. Promoting and using records of farming programs Providing individual instruction on the farm		12		
	•			
V. Facilities		31		
Locating materials	8 3	12		
Using and providing visual aids		. 12		
5 M-10 -1 1 5				
VI. Guidance	•	o		
Providing occupational and educational guidance	2	ò		
Selection and guiding pupils into an agriculture class	1	. 4		

Planning courses was the activity in which the largest percentage of beginning teachers reported difficulty. Using approved teaching techniques was next in importance as measured by the number of beginning teachers recognizing difficulties in this activity. Approximately one-third of the beginning teachers recognized problems in (1) pro-

Table I.—The Areas In Which Problems Were Recognized By Twenty-Six Beginning Teachers of Vocational Agriculture In Illinois In 1947-48.

Area	Number of teachers reporting problems in the area	Percentages		
Annual and long-time program	16	62		
Classroon teaching.	16	62		
Juliure Farmers of America.	13	50		
Supervised farming		42		
acilities		35		
Records and reports		27		
eterans' program		19		
Ivaluation		10		
Azricultural skills	4	10		
Juidaneo	3	12		
Relationships	2	8		

ing the school year. The eighty-seven postal-cards and five letters listed 182 problems, questions or difficulties. Approximately one-third of the teachers requested visits to talk over problems which they stated were too numerous to write on postal cards or in letters.

The difficulties which were sent in by postal card and letter were classified

*A portion of a doctoral study which involved a study of internship for prospective teachers of vocational agriculture in Illinois.

moting F.F.A. programs of work, (2) developing supervised farming programs, and (3) in locating teaching materials. Locating teaching materials was a particularly serious problem during the beginning of the school year.

Three or four of the questions which were sent in will show the general type of problems beginning teachers raised when the service described in the postal card survey was offered to them.

Problems of Beginning Teachers As Shown by the Follow-up Visits

A one-day visit to each beginning teacher was made during the year by a staff member of the department of agricultural education. An activity checklist was prepared and used in order that a staff member might have a guide in judging the major difficulties of the teachers he visited and in order that a record of these difficulties might be kept.

The twelve most common weaknesses and difficulties found in the follow-up visits were in the ability to

- 1. determine the needs of a community for agricultural education select and use advisory councils
- 3. provide a program to serve the groups who should be served
- 4. use problems in teaching
- 5. use field trips
- 6. secure and organize reference materials and teach pupils to use
- 7. make assignments
- 8. prepare and use plans for daily
- 9. develop a broad concept of supervised farming 10. obtain written plans for farming
- programs 11. encourage and supervise improvement projects
- 12. supervise the development of a Future Farmers of America program of work.

A weakness in the teacher-training program was indicated by the lack of adult education in the programs of agricultural education sponsored by the beginning teachers in 1947-48. The lack of recognized problems in this area as evidenced by the postal card survey was probably due to the lack of activity in a program of adult education. There appeared to be three reasons for the poor showing in adult-education activities:

(1) lack of interest

(2) lack of confidence

(3) lack of ability to budget time so that a program could be organized.

Lack of confidence may produce some unexpected consequences. Observations of the beginning teachers during the follow-up visits to their schools showed that some teachers who lacked confidence spent an excessive amount of time in preparation, made detailed lesson plans, kept excessive records, and were often generally worried and frustrated. Some even avoided certain activities entirely; and because of a waste of time in unnecessary activity, they lacked timeto develop all phases of the program of vocational agriculture, School, community, and professional relationships were often slighted and the adult-education phase usually suffered.

Observations of the beginning teachers also indicated that a concomitant result of a teacher's lack of confidence may be the development of autocratic tendencies as a means of providing himself with psychological security. Some teachers,' who were proficient and consequently confident in a particular area overemphasized this area and completely neglected other areas in which they lacked confidence. This situations produced an unbalanced program. The condition is often aggravated because the beginning teacher may find during the first year of teaching that his emphasis upon and success with one phase of the program provide him prestige and job security, and he may never develop a complete program of vocational agriculture in his school. If a teacher is to

periods. When they encountered problems in using new methods, the beginning teachers reverted to old habits. It may be that the new habits were not well enough established or that the reason or philosophy for following an improved procedure was inadequate.

A third conclusion drawn from the follow-up visits is that one of the major causes of difficulty was the lack of time for adjustment and orientation to new situations. The beginning teachers were over-whelmed by their new duties. They had failed to budget their time and organize their work. The most important objective soon became the accomplishing of the immediate job. This forced them to disregard important concepts, to develop habits which might eventually lead to serious difficulty, and sometimes to become generally frustrated. Frustration in some cases led to the seeking of other jobs at the end of the year, or it led to a loss of mental health

Many of the difficulties of beginning teachers, as viewed on the follow-up visits, could also be traced to a lack of ability in using good teaching procedures and to a lack of understanding of highschool boys.

Problems of Beginning Teachers As Shown By the Adequacy Questionnaire

At the end of the school year, 1947-48, the twenty-eight beginning teachers were sent questionnaires listing 181 professional activities usually performed by teachers of cocational agriculture. Each teacher was asked to indicate whether his preservice training had been adequate. Space for comments regarding the training for each activity was also provided.

Twenty-six of the twenty-eight beginning teachers returned the questionnaire. Table III is a summary of this questionnaire.

More than 25 per cent of the beginning teachers reported their preservice training was inadequate in 113 of the 3. advising the Future Farmers of America.

conducting parliamentary-procedure contests.

A few typical comments by teachers at the end of their first school year of teaching provide an indication of the feeling regarding the inadequacy of their training.

"Training given in stating and using objectives for a community program of agricultural education is theoretical.

"In handling disciplinary and prob-lem cases, I doubt if one could get enough training without experience.

"I have felt that more experience on how to conduct effective farm visits would have been desirable; still keeping in mind that much of this can be gained only through extended experience,"

Implications and Conclusions

Because it probably revealed the more pressing problems of teachers of vocational agriculture trained under the present program, the postal card survey should be given serious consideration. The results suggest necessary learning. Course planning, teaching classes, and the locating of materials, which were mentioned frequently in the postal card survey are the activities which a teacher must do

The beginning teachers indicated by their comments that more participatory experience was needed in order to develop a minimum of self-confidence and ability. The problems uncovered also indicated that all the necessary training can probably not be given before a person becomes engaged in the job of teaching vocational agriculture. Followup training during the first year of teaching or an internship at the graduate level appears necessary if our undergraduate courses in agricultural education are to be functional.

In summary it appears that the problems of beginning teachers indicate the nced for three types of improvement in

TABLE III.—Professional Activities In Which Twenty-Six Beginning Teachers Reported Through Questionnaires That Their Pre-service Training Was Inadequate.

and ong-time program	All-day program	Young- farmer program	Older-adult program	Veteran program	Visual aids	Guidance and counseling	Records, reports, and admini- stration	Instrue- tional materials and facilities	School, community and professional duties	Miscel- laneous
15	80	9		10	7	9				7
8	59	6	2	6	6	9	5	2	3	7
1	. 15	0	. 0	4	. 4	6	1	0	1	7
alian.	. 9	0	0				_		_	
	15 8	ng-time All-day program 15 80 8 59 1 15	ng-time All-day farmer rogram Program 9 15 80 9 8 59 6 1 15 0	ng-time rogram All-day program farmer program Older-a3ult program 15 80 9 8 8 59 6 2 1 15 0 0	ng-time rogram All-day program farmer program Older-adult program Veteran program 15 80 9 8 10 8 59 6 2 6 1 15 0 0 4	ng-time rogram All-day program farmer program Older-adult program Veteran program Visual aids 15 80 9 8 10 7 8 59 6 2 6 6 1 15 0 0 4 4	ng-time rogram All-day program farmer program Older-adult program Veteran program Visual aids and counseling 15 80 9 8 10 7 9 8 59 6 2 6 6 9 1 15 0 0 4 4 6	and rog-time functions Young-farmer program Older-adult program Veteran program Visual aids Guidance and counseling administration 15 80 9 8 10 7 9 8 8 59 6 2 6 6 9 5 1 15 0 0 4 4 6 1	and right in grams Young-farmer farmer program Very program Very program Visual program Guidance and equipment and program reports, and stration tional materials and facilities 15 80 9 8 10 7 9 8 5 8 59 6 2 6 6 9 5 2 1 15 0 0 4 4 6 1 0	and rog-time functions Young-farmer farmer program Older-adult program Veteran program Visual aids Guidance and counseling reports, and administration tional materials and facilities 15 80 9 8 10 7 9 8 5 23 8 59 6 2 6 6 9 5 2 3 1 15 0 0 4 4 6 1 0 1

to be adequately prepared, a minimum of confidence in ability to perform the necessary duties must be developed. After a minimum of confidence has been produced, attention may then be directed to the broader philosophical and psychological aspects of teaching.

Another general conclusion which may be drawn from the follow-up visits is that the beginning teachers tended to revert to the methods and habits which predominated in their teaching at the beginning of their student-teaching

181 professional activities on the guestionnaire. More than 50 per cent of the beginning teachers reported their preservice training was inadequate in 39 of the 181 professional activities. The activities in which more than 75 per cent of the twenty-six beginning teachers of vocational agriculture reported that their preservice training was inadequate are

- 1. instructing in farm mechanics
- 2. directing and supervising farming

our teacher-training program. They are

- 1, a realistic attention in undergraduate courses to the special and unique problems which beginning teachers confront during their first year of teaching,
- 2. an increased opportunity for participatory experiences in a greater proportion of the activities.
- 3. an organized and systematic program of internship and/or followup for beginning teachers.

Cooperation in teaching farm electricity

GEORGE DERR. County Adviser, Montrose, Pennsylvania PAUL SAWYER, Rural Representative, North Pennsylvania Power Company

T IS GENERALLY recognized that our present generation of farmers and the generations of the future must utilize power to compete for a living. Undoubtedly, this utilization of power will increase, and the farmer who makes the most efficient use of power will be the farmer who prospers. Electricity provides a convenient and inexpensive source of power. Advancement in machinery design is making electricity more adaptable to farm use, with a corresponding increase in the use of electricity. This increased consumption of electricity is being used to control even the weather hazards in spite of Mark Twain; we refer to the use of electricity for finishing hay, barn ventilation, and milk-house heating. Much greater use of electrical power in the future is to be expected in agricultural production and living.

The need for electricity has advanced much faster than the knowledge of how to handle it. The farmer has added much new electrical equpiment without a thought as to whether or not his wiring system will carry the load efficiently. Much of the farmer's wiring system is built around the original wiring for a farm battery-generator system. At best, he is using a wiring system planned and designed for lighting only. The farm wires dangerously overloaded cause unsafe, uncconomical and unsatisfactory performance of electrical equipment and appliances. After a comprehensive survey in Susquehanna County, we estimated that only 65 per cent of the electricity, for which farmers pay, reaches the appliance for which it was intended. This leads to dissatisfaction on the part of the farmerdissatisfaction with the machine, and with the utility supplying the power. The farmer with poor wiring, therefore, adds additional equipment reluctantly, and great loss of human effort results.

In Susquehanna County, Pennsylvania, we are attempting to meet this need. The power company has placed needed facilities in the hands of agricultural education and the result has been gratifying. Our method, which has been so successful in teaching this subject, is the result of vision, determination and cooperation on the part of three agencies, namely: the Department of Public Instruction, the Pennsylvania State College, and the electric industry. The methods used are those contained in Miscellaneous Publication No. 1 of the School of Agriculture, Pennsylvania State College, Manual of Demonstrations and Lessions in Teaching Farm Wiring by D. C. Sprague and J. B. Stere. It contains complete directions . for assembling the apparatus and, it includes outlines around which lessons can be built. The method of teaching employs fundamentally sound vocational techniques. This implies learning both by doing, and direct observation of cause and effect, which is the secret of its success. For example, the effects

of wiring upon the performance and economy in operation of lighting, heating and power appliances are observed and measured by the students. In the course students lay out a complete wiring system for their farms. They make drawings for the future development of their wiring systems.

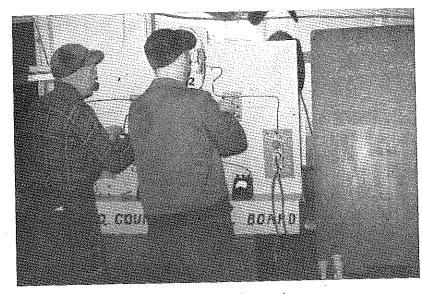
The success of our plan has been evident. It meets a need as shown by tremendous interest on the part of three groups, namely, Future Farmers, veteran trainecs who are becoming established in farming, and adult farmers who have been established in farming for some years. The latter group of adult farmers is the most recent group to receive this instruction.



Paul R. Sawyer



to carry the present load, and only 14 per cent thought that their wiring was sufficient to carry the load that they must put on during the next three years, Eighty-four per cent of those taking this course planned some wiring changes and 56 per cent planned major wiring changes immediately. Changes included the erection of power poles, the establishment of load centers, and installation of circuits from these load centers and



Adults like practical approach

Farm Mechanics R. W. CLINE

The established farmers are the ones who profit most immediately from the training program. As has already been stated, it was impossible for many farmers to make increased use of electrical energy without major changes in wiring layouts. Let it be definitely understood that this program did not teach the intricacies of electric wiring. It did give the students a first-hand knowledge of wire sizes necessary to get the electrical energy to the place where it will be

The writers conducted a ten-week course in Wiring for the Future for adult farmers. Forty-two adult farmers were enrolled. At the close of this course, information was assembled which we are going to pass on to you. Only 28 per cent of the farmers believe that their wiring was of sufficient size

power poles to the several appliances. Circuits of ample capacity to carry future loads were planned. Ninty-six per cent had installed some form of motor protection, such as circuit breakers, fusetrons, or fusestats. These devices were applied to 92 motors.

The figures are ample proof to us that these courses are well worth the effort. Thus, the bottleneck to successful and economical use of light, heat and power on the farm is being eliminated. Last, but not least, is the value to both vocational agriculture and the electric industry of the good will created. Susquehanna County, in being the first in the state to establish this type of program in its schools, has proved its success and value.

Planning farm mechanics instruction

P. A. NORRIS, Teacher, Benton, Mississippi



P. A. Norris

M ANY students have failed to learn because the teacher has failed to plan. In order to

teach farm mechanics with maximum proficiency, the instructor must plan and plan well. The plans for a program in farm mechanics can be compared to the

plans made by an architect before construction of a house. Before a plan is drawn up the architect makes a careful study of the many features that will go into making the house suitable for the people who are to use it. So it is with planning a farm mechanics program. The teacher of vocational agriculture has to study the factors that go to make a worthwhile program and then draw up a "blue print" to guide him in conducting this program which, if carried out, will give him the kind of product he desires.

Setting Objectives One of the first things a teacher should do in planning the farm mechanics course is to set up some broad objectives which he hopes to attain during the course. These objectives should be kept in mind while planning the details of the course and when giving the instruction.

Some of the objectives of the course in farm mechanics may be stated as follows:

- A. To develop proficiency in tool processes and skills necessary to perform practical and economical shop jobs through instruction and work experience in the school shop and on the home farm in each of the following areas:
 - 1. Simple drawings
 - 2. Tool repair and maintenance
 - 3. Farm carpentry
 - Cold Metal
 - 5. Plumbing
 - 6. Painting Concrete work

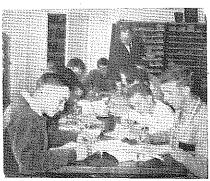
 - 8. Glazing
 - 9. Electricity 10. Rope work
 - 11. Harness care and repair
 - 12. Blueprint reading
 - 13. Care, service and repair of farm machinery
- B. To develop the ability to choose the best tools available for a given job to be performed.
- C. To develop ability to service and maintain farm tools, equipment, and machinery.
- D. To develop ability to select and purchase needed tools, farm machinery and equipment.
- To develop ability to choose the best and most appropriate materials for construction and repair

- F. To develop appreciation of the value of a home farm shop to efficient and economical farming.
- G. To develop ability to select, think through, plan, and carry out to satisfactory completion construction and repair jobs.
- H. To create the desire and develop ability to perform jobs in a workmanlike manner with emphasis on neatness and accuracy.
- I. To develop appreciation for keeping a neat, clean and orderly shop.
- To develop appreciation for observing and practicing standard safety practices at all times.

Determining the Content of the Course

The content of the farm mechanics course will vary from school to school. Some schols will place major emphasis on farm machinery repair; others will emphasize carpentry and forge work. This is expected since the local conditions will vary.

In planning the content of the course in farm mechanics, the instructor should keep in mind certain factors such as: (1) The needs of the student, (2) the interest of the student, (3) the ability of the student, (4) the type of



Students share in planning

farming in the community, (5) the facilities for teaching farm mechanics, and (6) the qualification of the teacher and ability to secure skilled teachers.

One of the most important factors in determining the course content is the needs of the student; assuming or guessing at these needs is not sufficient for making a decision so important as determining the content of the farm mechanics course. A careful survey of each student is needed. This survey should cover the specific construction, repair, and maintenance needs of the student's home and farm, Shop books and bulletins suggest several different kinds of surveys. The teacher should use these as a guide in preparing a survey and supplement this with his own

A summary of these surveys, together with a knowledge of the school shop facilities, the student's ability, the type of farming in the area, and the qualifications of the instructor and special

teachers, should enable the instructor to decide on the content of the course. If the survey shows the needs of the students to be largely for items requiring farm machinery repair, then major emphasis should be placed on this unit of instruction; if the survey shows that wood work is of greatest interest and need, then the course should be built around this unit.

Planning the Course Calendar Effective shopwork calls for planning the amount of time for shopwork. This will vary.

The following example will illustrate how a course may be set up.

Name of Area

The Course Outline

	1	2	3	4	Tot.
Carpentry and woodworking	25	20	15	10	70
Tool fitting		5	5		20
Sheet metal					10
Cold metal	8	8			16
Forge work and welding	10	10	5	5	30
Harness Repair	8	8			16
Ropework		5	7		12
Concrete work				20	20
Farm Machinery	9	16	20	25	70
Plumbing		- 8	8		16
Terracing and Drainage			10	10	20
Electricity			10	10	20
*		_	_	_	
	80	80	80	80	320

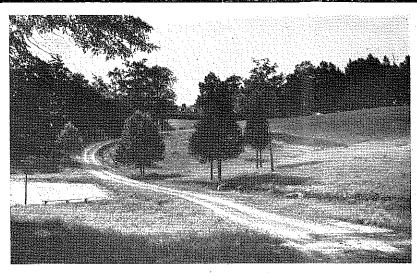
After the course has been outlined the teacher should outline the specific skills that he wishes his students to develop in each area of instruction. The following will illustrate how the area may be broken down into specific jobs:

r ear				
1	2	3	4	Tot.
N	սահ			
2	2	2	2	8
ī	2	2	- 2	7
-	2	-	_	2
3		6	9	20^{-}
	2			2
	_	4		4
	4	_		4 4 5
	1	2	2	5
1				1
			6	6
1			-	ī
		4	6	10
			_	
9	16	20	25	70
-				
Year				
	2 1 3	2 2 1 2 3 2 3 2 2 4 1 1 1 1 - 9 16	1 2 3 Number of 2 2 2 2 1 2 2 3 2 6 2 4 4 1 2 1 1 2 1 2 2 2 3 2 6 2 4 2 1 2 2 2 0 6 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 2 3 4 Number of hou 2 2 2 2 2 2 1 2 2 2 3 2 6 9 2 4 4 1 2 2 1 6 6 1 1

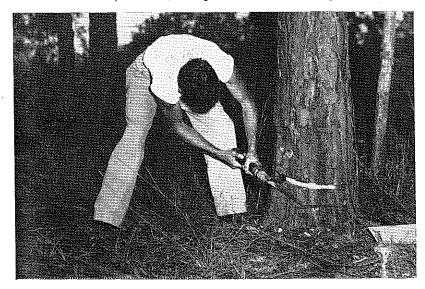
	riumoing	Т		er of l		100.
	1. Identification of fittings	111	4	2 01	uoui	° 4
	ing pipe		2			2
	3. Packing faucets and valves		-	1		1
	4. Assemble pipes	-	2			2
	5. Cutting gaskets			1		i
	6. Removing defective pipe			3		2 1 2 1 3
	7. Installing sink and drain			3		3
;		0	8	-8	0	16
,		v	U	О	v	10
•	Terracing and Drainage			Year		
		1	2	3		Tot.
		N	umb	er of	nou	
3	1. Using a farm level			4		4
S	2. Determining grades, figuring			в		c
	data, cuts, etc.			U	6	6
r	Running terrace lines Running lines for open ditches				4	4.
t	4. Editing thes for open disones	_		_		
S		0	0	10	10	20
1	Electricity			Year		
£	Miccorday	1	2	3	4	Tot.
		- >	uml	ber o	f ho	ars
y	1. Splicing wires			2		2
ι,	2. Attaching wires to terminals			2		2
	3. Repairing electric cords			2 2 2 1		2
e	4. Reading meter			3		1
S	5. Making an extension cord			3	a	ð
t	6. Installing 3-way switch				2 4	2 2 1 3 4
	7 Cleaning and lubricating motor				-	. *
d	8. Making extensions to wiring systems				4	4
_	оуочена	_	_	-	_	
n	¥	0	0	10	10	20

Next to its relative isolation, the most important fact about the distribution of farm families on the land is that half of all the 6,300,000 farm families in the United States live in the south.

* FELLOWSHIP *



Camp Clements, looking toward the main building



Teachers help develop farm skills of many types

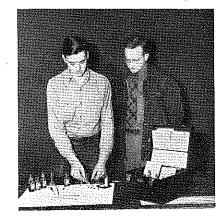
PERHAPS the outstanding individual forestry project in Florida is operated by a sandy-haired 15-year old farm youth from the Suwannee River Valley. He is Herbert Dorsett, of Branford.

Herbert became interested in gum farming through his work in vocational agriculture. He decided he wanted to try gum farming and persuaded his father to let him work 40 acres of his land along the Suwannee River. His father told him it was a mighty big job

But Herbert wasn't worried. He'd heard about the new method of bark chipping and acid stimulation, and he knew it wouldn't take so much time and would also be easier. Under this method the bark alone was chipped off and the barc wood sprayed with a soultion of sulfuric acid which made the gum flow faster. In March of 1946, Herbert got started. In the next two years, he made \$450 after paying off the cost of his equipment.

H. E. WOOD

Supervisor, Florida



Douglas Wheeler, president, Newberry Chapter F.F.A., using acidity tests on soils under the supervision of Edward Eaton, instructor of vocational agriculture.

Only 22 per cent of the rural farm population aged 25 to 30 have finished high school, compared with 44 per cent of those in the urban population (1940).

Teachers need recreation

TEACHERS of agriculture from Tennessee hold their annual conference at Camp Clements. Although it is by no means regarded as a vacation, the five-day period does include time for recreation as well as work. Teachers are able to develop a spirit of fellowship that would be impossible in most other settings. Living, working and playing together for a five-day period helps them to recreate vision and enthusiasm for the tasks of tomorrow.

Camp Clements, located on the Caney Fork River near Sparta, Tennessee, is owned and operated by the Tennessee Association of Future Farmers of America. The camp consists of approximately 25 acres of land, four buildings, a swimming pool, shuffle board courts, baseball diamond, tennis courts, and a rifle range. The camp will adequately accommodate 200 F.F.A. members and their advisers.

This camp is the product of the ingenuity of the farm boys in Tennessee who are members of the F.F.A. The camp site, located near the geographic center of the state, was donated by the late N. A. Ward. It is on a high bluff overlooking the Caney Fork River and in the foothills of the mountains. Chapters throughout the state made cash contributions raised by collection and sale of scrap, pie suppers, plays, chapter projects of crops and livestock, and in various other ways.

Camp Clements has operated from four to eight weeks every summer since its initial opening in 1930 except during the war years when help and transportation difficulties prevented it.

S. L. SPARKES, State Department of Education

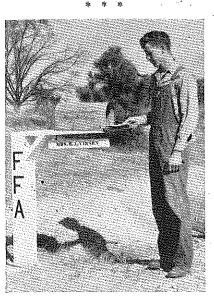
Community corn show

M ANY instructors pass up opportunities that could be theirs if they would only take advantage of the things near at hand. Noel C. Hatle, instructor at Long Prairie, has taken advantage of an opportunity that would really give publicity to the department.

Many towns in north central United States have corn shows sponsored by various organizations but the Long Prairie department assumed the sponsorship of the corn show as its responsibility. The corn show is a one day affair and is held in the high school gymnasium. It is held on Saturday and continues Saturday evening to enable the farmers to attend the program and see the exhibits. The F.F.A. president was in charge for the evening and this gave the F.F.A. boys opportunity to tell the people in the community what their organization was doing. Local talent was used for special musical numbers. The county agent explained the purpose and procedure used in field-testing hybrid corn which was carried out on one of the local farms. The instructor explained the purpose and procedure of the field-run contest. Mr. Ralph Crim, Extension Agronomist, University of Minnesota, judged the corn.

DOUGLAS KNABE, Student University of Minnesota St. Paul Different organizations in Hamilton County, Florida have joined to form the Hamilton County Agriculture Workers Association. The purpose of this association is to coordinate all agricultural activities and to promote agricultural in the county. Mr. J. P. Deloney, Teacher of Agriculture at Jennings High School, was elected president of the association.

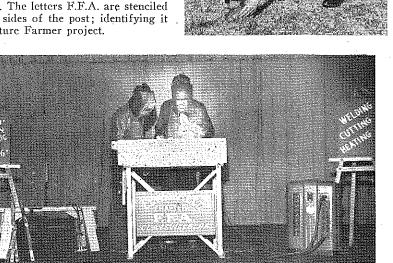
—Florida Future Farmer



The new look on rural routes in Alabama

MEMBERS of the department at Red Bay, Alabama conducted a campaign to replace the decaying and tottering posts which support mail boxes on the rural route in their vicinity with uniform white boxes. Each F.F.A. member living on a rural route has improved his box.

The new posts are four feet high, six inches square, and stand erect. They are painted white with the owner's name stenciled in black on both sides of a name plate which hangs directly under the box. The letters F.F.A. are stenciled on two sides of the post; identifying it is a Future Farmer project.



First Place in the Pennsylvania Electric Association electrical demonstration contest at the 1949 Pennsylvania Farm Show. Second in vocational agriculture demonstrations at the 1949 Pennsylvania Farm Show. "Can You Learn to Use an Electric Welder?" demonstrated by William Clemens, Claysville High School, Washington County, Harold Hutchinson, teacher.

Teachers honored

Highlight of Bakersfield's 29th annual Father-Son banquet was the presentation of a gold watch, suitably engraved, to the head of the department, Howard K. Dickson, who came to Bakersfield in 1919 to start the nation's present largest vocational agriculture department with two students.

The banquet attracted more than 650 F.F.A. members and guests. Principal speaker was John Newbauer, former head of the San Francisco Boys club, who emphasized the need for close relationship between fathers and sons. Student speakers talked on project development.

John Gobler, president of the Kern County Young Farmers, discussed the objectives of his group and opportunities for graduating F.F.A. members. Ernest Upton, chapter president, was the toast-master and presented Adviser Dickson with the watch, says reporter Tom Hart.

—California Future Farmer



Ohio

George H. Krill, instructor of vocational agriculture at Ashland High School, Ohio since 1922, was honored with a surprise birthday dinner attended by 150 former students, teaching associates and members of his family. The highlight of the evening's program and entertainment was the presentation of an outboard motor to Mr. Krill who is a great fisherman.

Paying tribute to the honored guest were four of his six brothers with Dean Walter Krill of the College of Veterinary Medicine, Ohio State University, serving as spokesman for the family. Superintendent Tamison expressed his appreciation of the fine work which has been done by Mr. Krill. Other speakers included Principal Gorsuch. Dr. W. F. Stewart, and F. J. Ruble of the Ohio State University, Included in the list of those present were twentyfive State Farmers and four American Farmers. Mr. Krill can rightfully feel proud of the achievements of these boys and many others with whom he has worked during the past 26 years. Their programs are a living testimonial of his work in the community.

-Ohio Future Farmer

Teacher and students set millionth pine

PICTURED at the left is L. C. Shields, Teacher of Agriculture, Jemison, Alabama, with two of his students as they set the one millionth pine seedling. Alabama Future Farmers have planted more than a million pine seedlings on their farms this year. The program is sponsored by the State Chamber of Commerce and the seedlings are supplied by the State Forestry Nursery at a small cost to the F.F.A. boys.

This cooperative forestry program was started back in 1942 when the following three men first originated the idea. These three men were John M. Ward, Executive Vice-President, State Chamber of Commerce; J. M. Stauffer, State Forester; and R. E. Cammack, Director of Vocational Education, who at that time was supervisor of agricultural education. These men visioned the idea of Alabama Future Farmers planting a million or more trees each year and that within fifteen or twenty years they could reap their harvest.

Ex-Teachers' new work

Of 225 Wisconsin teachers of vocational agriculture who were employed in schools of the state in 1941-42, 96 or nearly 43 per cent were in other occupations in 1947-48. The largest number, 47, had gone into farming or business mostly related to agriculture, 19 had become county agents, assistant county agents, or club leaders, 6 were school administrators, 6 had gone into soil conservation or similar positions. and 6 were in university positions. In addition, 41 of the instructors who were in high school work in 1941-42 were instructors of On-Farm Training in 1947-48. Figures were compiled by William E. Patterson, a student in Agricultural Education at the Wisconsin College of Agriculture.

Future Farmers of America

H. N. HANSUCKER

Junior vegetable growers and the FFA

GEORGE K. VAPAA, Teacher, Harrington, Delaware



George Vapaa

M bers of our F. F. A. chapter have just completed up to three years of participation in the program of the National Junior Vegetable Growers

ANY mem-

Association - better knows as the NJVGA. Of all our chapter activities we find that

this offers the best challenge to individual initiative. I have lately wondered why the program of the NJVGA has not been more quickly seized upon and adopted as an activity of F.F.A. chapters. It has a wealth of possibilities. It broadens the interest of the farm boy who is anxious to know more about vegetables than simply how to grow them and spurs on the town boy in agriculture whose farming opportunities are often limited to small garden projects. By stressing marketing as well as production as an objective, a boy's mind is opened to his responsibilities to the ultimate consumer for the quality of his produce. He also is awakened to the opportunities of more fully processing goods for the consumer in order to realize higher profits.

Members of our chapter have attended the last two national conventions of the association-in 1947 at Jackson, Mississippi, and in 1948 at Detroit, Michigan. We expect to go on masse to the 1949 meeting which is to be held in Washington, D.C. These conventions are doing affairs. Each person attending takes an active part in every part of the program. The conventions are usually fourday events. The first two days are filled with tours to produce markets, processing plants, industrial centers, as well as to the regular sight-seeing points. A program of square and informal dancing, nationally known entertainers, and demonstrations is provided in the evenings. There is a day set aside for the national demonstration contests on some phase of producing, marketing, or processing vegetables. This corresponds roughly to the F.F.A. Public Speaking Contests, although the emphasis in the demonstration is on doing something along with talking about it. The last day features a grading, judging, and identification contest which is large and comprehensive enough to test thoroughly the abilities of each participant. The convention is climaxed on the last night

with the awarding of some \$10,000 in prizes at a grand banquet.

There has been formed in our state a loosely-knit organization called the State Unit of the NJVGA to handle contests and activities on more localized levels. The official state team in the National Demonstration Contest is selected as a result of a state contest conducted by this group. An F.F.A. team from Milford, Delaware consisting of Fred Michel and Glenn Dill won out last year with a demonstration on "Hotbeds and Coldframes." Then too, at our Kent-Sussex (State) Fair, two contests are held by the State Unit. One is designed to encourage better exhibits in the regular F.F.A. and the 4-H classes. The top winners received \$20 toward their expenses to the National Convention for the greatest number of points carned with their vegetable exhibit entries. The other contest is a preliminary to the national grading, judging, and identification contest. Here again two \$20 prizes are given. The Kent-Sussex Fair Association provides a total of \$100 in prizes for these contests, as well as the opportunity to put on a display explaining NJVGA activi-

One complaint sometimes heard from teachers is that this program does not interest every boy. Should it necessarily? An interesting point to note, though, is that boys who become interested, hold their interest over a period of several (Continued on Page 43)

Cooperation in FFA forestry projects

H. E. WOOD, Supervisor, Florida



H. E. Wood

chapters in Florida planted 296,440 seedling and individual members planted an additional 571.534. Chapters and individual members also planted 241,140 seedlings for others, making a total of 1,109,114 seedlings planted.

THIS year F.F.A,

Thirty-four chapters have established school forests. These forests are located on 369 acres of land owned by the chapters, on 1,017 acres of land leased from the state and 771 acres of other land.

Some chapters have unusually good records. One of these is the Leesburg chapter. Encouraged by the Leesburg Junior Chamber of Commerce, and backed by other civic groups, the Leesburg chapter is setting up a mark of achievement for other chapters to shoot at. The Leesburg chapter plans to add 100 acres to the Lecsburg school forest each year until a total of 1,200 acres has been added and planted.

The Leesburg chapter planted 70,000 scedlings this year, with the boys doing the planting themselves, using planting tools and a planting machine they were able to borrow. This project is thought to be the largest of its kind among F.F.A. chapters in the United States.

Each summer an outstanding student from each of the State's F.F.A. chapters is invited to attend the Annual Forestry Training Camp sponsored by the Florida Forest Service. At the camp the boys are taught the principles of good forestry, and are given an opportunity to actually do in the field what they learn in classes.



Thinning operations in school forest carried out by F.F.A. members of Florida.

Chapter demonstration plot R. E. HAUPTMANN, Teacher, Mount Ayr, Iowa

THE Mount Ayr F.F.A. chapter was recently awarded a new tractor and equipment as one of the two winners in the Iowa state soil conservation contest. The contest was judged on the basis of the chapter activities in soil, conservation. The chapter has leased a 40 acre plot

of ground with no improvements, which thay are going to use as a demonstration plot and farm with their newly acquired equipment. This plot of ground is located one mile west of Mount Ayr on a paved highway. It is very representative of the farms in southern Iowa, with several soil types including gulleys, hill ground, and some bottom ground. The chapter has a five year lease on the plot for which they pay \$4 per acre yearly cash in advance. The chapter has full operating control of the farm. The chapter is to keep up the fencing, with the landlady furnishing the material. The chapter intends to plant 6 acres of certified Broadleaf Birdsfoot Trefoil, 9 acres of certified Adams soybeans, grown under contract with the state seed development committee, 20 acres of corn, and 5 acres of Reed's canary grass. Plowing has been completed in preparation of seeding the 6 acres of trefoil, Two hundred pounds of 20 per cent super phosphate will be applied per acre after which the seed will be prepared and the trefoil seeded in rows in order that it may be clean cultivated the first year to eliminate weeds. The crop is being grown for a seed increase. We hope to harvest a high quality seed which we can make available to chapter members and farmers of the community for pasture improvement pur-

The 9 acres of Adams soybeans will be planted on the level bottom land and will also be grown for seed increase. The crop will be certified and the seed sold to chapter members and farmers of the community.

The 20 acres of corn is being grown for two reasons, first in order to clean cultivate the ground in preparation of seeding to a legume, and secondly, to experiment with a number of hybrid varieties as a means of giving farmers of the community an opportunity to compare the merits of each. To date five varieties and thirty-six numbers are planned. The 5 acres of Reed's cannary grass will be planted on low wet ground near a highway spillway. This crop is to be grown as a means of making sods available to farmers of the community for use in grass waterways, pond spillways, and gully control plant-

Besides the experimental work with various crops and varieties, many fertilizer experiments will be carried out. For example, rows and partitions of the various crops grown will be fertilized with different fertilizers applied in different amounts. This will give opportunity to study first hand, the effects of fertilizer. We are interested in helping to discover for the farmers of the community the best fertilizer practices to follow with various crops common to the community.



Executive Committee makes oral agreement with owner, and

President signs long term lease for Chapter plot. Lease was prepared by an attorney.



Soil conservation and soil building practices are not to be overlooked. We are cooperating with the county soils district through the soils technician in planning the practices to be carried out. The technician is helping us plan the construction of four grass waterways, numerous check dams, the filling of four large gullies, and the construction of at least two terraces. Five years will be required to complete the necessary conservation practices on the 40 acres. The various practices will be accomplished in much the same manner as farmers of the community should approach them, a few each year. This year we intend to construct one-half mile of terrace, fill one large gully, and construct two grass waterways to control the most serious crosion. The following year we will correct the next most serious crosion problem and so on until at the end of five years we hope to see the entire 40 acres in good condition.

We are planning a demonstration and field day, at which time we will construct one-half mile of terrace, using various implements; some gully filling, check dam construction and ditching work will also be done. This demonstration will be held on our 40 acre plot. We are cooperating with the local soil conservation district in planning this field day as well as all conservation practices used on our plot.

All the work on this plot is being done by chapter members and one member is to be employed to take care of the work during the summer. When no work is required on the 40 acres, the tractor and equipment will be used to do terracing and gully control work for farmers in the community.

Loan analysis contest

J. CORDNER GIBSON, Regional Supervisor, Los Angeles, California

THE study of agricultural credit in the vocational agriculture departments in Los Angeles county is made more realistic through a cooperative effort with the Los Angeles County Production Credit Association. This cooperative program is in the form of a loan analysis contest which is held each year for Future Farmers.

The secretary-manager of the Los Angeles County Production Credit Association picks out three actual loans, One in citrus, dairy, and poultry. The names are changed to camouflage the actual applicants' names. Copies of these are sent to the various departments and each department has a local contest and picks the winner in his school in each of the three enterprises. In this contest each boy is to consider himself a secretary of a loan association and assumes that it is his responsibility to present to the local association's loan committee the desirable and undesirable features brought out in the loan appli-

The winners of each of the schools are brought together in a semi-final contest where each contestant is allowed six minutes to present his arguments or present his discussion, and then judges question him for five minutes on any point that he may have brought out in the application.

The winners in each of the three enterprises then compete in a final contest at the annual stockholders meeting where they appear before the entire group and present their discussion of the loan. Again, judges ask them pertinent question on their presentations.

In the semi-final contest the first, second and third high individuals receive engraved cups. In the final contest the Future Farmers receive \$25, \$15, and \$10 for first, second, and third places respectively. The contestants are evaluated 25 per cent on delivery, presentation and appearance, 50 per cent for the analysis, and 25 per cent for response to questions.

Through the stimulation of a contest and prizes, agricultural credit has meant more to students of vocational agriculture in the high schools in Los Angeles county. Nearly 500 students are brought into this contest through this cooperative program.

The Vermont Association of Future Farmers has for the past two years conducted a pasture improvement program. The purpose of this pasture improvement program is to help to introduce the use of Ladino and Brome grass to the Vermont farmer by planting of one acre of pasture. Again in 1948 seed for planting one acre of pasture was sent to fourteen chapters.

A loan fund is maintained by the Vandalia, Illinois, Chapter of F.F.A. to assist members in the purchase of livestock and feed. Thus far this year more than \$1000 has been loaned for this purpose.

Twelve years of farmer education

(Continued from Page 31)

tion added throughout the winter enabling the men to meet new people.

Last September a group of these men came to me and asked to get our Young Farmers' Association started again. This is the first time I have ever had this happen. Usually the course is started in mid November or later, and with me making the initial move. Five men were asked to assist in setting up the program for the year. This program was submitted to the entire group for acceptance. The program as planned and carried out follows:

September

27 Committee Meeting

October

4 Organize and Elect Officers

11 Committee To Set Up Program
18 Poultry Housing and Equipment
25 Bangs and Mastitis in Cattle*

November

1 Poultry Diseases 8 Sportsmanship in the Field

15 Dairy Cattle Breeding 22 Party (stag)

29 Production Credit*
December

3 Feeding Principles 8 Trap Shoot Night 16 Safety*

20 Feeding Dairy Cattle

January
3 Pasture and Meadow Program

for Cattle 10 Father and Son Banquet*

10 Father and Son Ba 16 Bowling 17 Seeding Meadows

24 Etiquette*
31 Importance of Silage

February

Report on State Y.F.A. Conference

11 Party (dance)

14 Maintenance of Farm Machinery* 28 Farm Machinery*

March

7 Calf Feeding

14 How Banks Serve Our Com-

21 Poultry Diseases*
28 Rural Health Problems*

April
5 First County Group to be Blood
Typed
Trip to WLW Radio Farm

May
To be arranged

June

2-4D Demonstration

July

To be arranged

Trip to Ohio Ag. Exp. Sta.

*Indicates guest speaker.

I might add that with this set up the officers this year have accepted their responsibility and have relieved me of a great amount of work.

I feel that this program has been a success but there will be a great many changes in the future to make it better. I truly believe a program of this type will reach a greater share of the problems of the young men and make them eventually better farmers, better leaders, and better citizens for our community.

Cooperation with other agencies in a veterans' program

ing the purchase of a farm and farm production financing. Speakers are furnished by Production Credit Association, Federal Land Bank, Farmers Home Administration and local lending institutions. We believe that this is one of the most important functions of our program since we are running into difficulties in cases where loans were made to veterans before our program was started. Some of these young mensecured loans with which to buy poor farms at inflated values and they are

now in trouble. We believe that at least

some of the errors could have been pre-

vented if the veteran had come to school

(Continued from Page 30)

During December, tax experts discuss various income tax problems, and specialists from the college discuss inventories and the keeping of farm records. A farm record specialist helps the members of each group start their particular type of records and is available to assist individuals with record problems.

One month is devoted to the study of the latest in farm machinery. Each local dealer is given an evening which he may use as he sees fit. This year each dealer had factory representatives discuss ways and means of getting the best results from their machinery and equipment. The dealers have entered into the spirit of these meetings and have really done fine teaching jobs.

Four meetings are devoted to the study of farm buildings of all kinds, planning new buildings, construction problems, and renovation of old buildings for new purposes. The speakers at these meetings include members of the farm engineering staff at the Agricultural College and a representative from the paint industry.

Since we believe that the proper use and care of the soil are fundamental in any successful farming venture we devote considerable time to this phase of the farm problem. For leaders in these meetings we use the services of members of the soils department at the college, the Soil Conservation Service and the Campbell soup company soils department.

Disease and insect problems are ever with us and to give the veterans the latest information in their prevention and control we have been fortunate in securing the help of prominent research men from the various chemical companies in addition to the pathologists and entomologists from the Agricultural College.

In addition to all of the various fields mentioned above we have had well qualified experts talk to the young men about proper forestry methods for their farms, landscaping the farmstead, the selection of the proper fertilizers and the most effective methods of using them. In the latter field we have received very good cooperation from various fertilizer company experts who have done the job without bringing in any sales talk. Representatives from

the various chain stores and other commercial buyers have discussed proper grading, packaging, and selling methods to secure the greatest return for the products grown.

THE AGRICULTURAL EDUCATION MAGAZINE, August, 1949

One last example of the fine spirit of cooperation which exists between our program and all cooperating agencies might be cited in the following example. The small fruits specialist is to attend a forthcoming meeting of the fruit class and since there are not too many growers of small fruit in our locality, it was decided to invite all growers to the meeting, thus giving them all the benefit of attending the meeting.

We attempt to carry the spirit of cooperation into the field as well as in the classroom. Our basic rule for all of the staff is that where one instructor visiting a veteran on the farm feels that another instructor might be better able to help the young man with a specific problem, he is to ask the second to go to the farm and help solve the problem. Just a couple of examples: One of our men is a specialist in soil conservation. Other instructors are free to ask his cooperation in soil drainage, and contouring. Another is a specialist in canhouse tomato problems, and he often goes out of his way to assist others with these special problems. Perhaps the biggest asset to the program is a member of our staff who is a retired farmer. He is a recognized leader in the State Farm Bureau and many other farm organizations. His presence lends prestige to the program and he is untiring in his willingness to assist any veteran in the program with his credit problems and other matters where the help and advice of a recognized farm leader is invaluable,

We also have a number of veterans who for one reason or another are not receiving subsistence but who come to the classes regularly. This, coupled with the fact that a majority of the veterans continue to attend class after their entitlement has expired, would seem to indicate that when a worth-while program is offered perhaps the subsistence is not the only reason, as we sometimes hear, for the large majority of veterans entering and continuing in the Institutional On-Farm Training Program.

Our experience proves to me that there is a vast reservoir of assistance available for use in training young farmers if we will but secure the cooperation of all other agencies. None have refused to help.

Vocational agriculture is well represented in the state leadership of the newly-formed Duroc Jersey Swine Breeders association. The vice-president is Jim Taresh, Rio Oso, former East Nicolaus F.F.A. member and Cal Poly graduate; secretary-treasurer is Wayne Hansen, former Utah F.F.A. member and present Ceres vo-ag teacher. Reldon Dunlap, Cambria, is a former Chino F.F.A. member, now a vo-ag teacher, serving on the state board of directors with Bates Bowers, Coalinga, former Cal Poly student, F.F.A. members' may get a membership in the association for \$1.00 per year.

—California Future Farmer

Farming programs and establishment

(Continued from Page 27)

This brings out the importance of guiding boys while still in school to build their supervised farming programs around the major enterprises found on farms in the community.

- (6) Young men either single or married who stayed under the roof of their parents after leaving school, did not progress as fast as those who moved away from parental influence, even though it was only a short distance from the home farm.
- (7) When young men marry they usually move one-fourth to five miles from their old home, but close enough so they can borrow or trade work for the machinery owned by their parents. According to their statements, since the investment in machinery and equipment is high on many farms, they could see no reason for having two sets on the two farms. These young men therefore made investments in livestock and crops for production purposes.
- (8) Many of the young men were renting additional land before they left school and practically all were renting a considerable acreage their first year out of school. The first two years out of school was a period of rapid expansion in their farming operations. Investments in land usually started at their third year.
- (9) The young men who went directly into farming after leaving high school were the ones who had comprehensive supervised practice programs at that time i. e., three or more crop and livestock enterprises with considerable scope in each. Those who only had one or two barrows, one steer, one or two cows, a small flock of chickens, one to five acres of corn or a garden at the time of leaving school and later went into farming, stated frankly that they did not have enough livestock or crops to begin farming at that time. This group worked at other occupations for four or more years in order to accumulate sufficient capital to get a start. From this study one can conclude that the young men who had been guided and assisted by teachers in getting an early start with major enterprises and who expanded their programs through the four years, had an advantage of at least four years over those who had little to show in terms of a good farming program at the time of leaving school.

The teachers in these departments knew each young man's farming program and were working closely in assisting each one to continue his advancement in farming. They were deriving much satisfaction from seeing their former students growing into successful farmers.

How can we improve our programs to assist boys to make a beginning and to advance in farming?

A teacher must know his community. On going into a new department, he will need to make studies to determine the type or types of farming. He should become acquainted with the successful

farmers and know the combinations of enterprises which make up their business. He should also know the size of business, rates of production of livestock and crops, and other management factors. A teacher going into an old department has an advantage not only in having access to studies made by former teachers but also in having examples of boys and young men from freshmen to young farmers out of school to use as patterns.

Thus, much depends on the teacher, his background of experience on a good farm, his training in college, his willingness to make community studies and analyze them, and finally in his deep interest in farming and farm boys. He must guide and assist students in the wise selections of their farming programs, visit them frequently on their home farms and motivate them through their successful experiences into an expanded program of supervised practices that will lead into farming.

C. L. ANGERER, Teacher Education Oklahoma A. &M. College

Junior vegetable growers and the F.F.A.

(Continued from Page 40) years. Our chapter has one boy who has completed his third year of NJVGA activity. He is the boy who did more than anyone else to draw in the rest of the group through his interest. He won a \$100 prive in 1948 as a sectional winner in the production and marketing contest—mainly as the result of a persevering attitude, and by profiting on the experiences of his earlier efforts.

the experiences of his earlier efforts.

Everything in this program can be done as a regular F.F.A. activity by any chapter. It can probably be done best as an F.F.A. activity. Dale Schinbechler, teacher of vocational agriculture at Kendallville, Indiana, whose F.F.A. members took most of the high honors in the National Grading Contests, will no doubt concur on this. So too might Paul Tuttle, teacher at Vermillion, Ohio, who is serving as a regional adviser in his area. The F.F.A. boy can do a whale of a good job at this activity by himself if he is ambitious.

As a teacher, I believe that most of us would like to limit our own activities—and do a good job with a few of them. We are inclined to feel that we should stay within the scope of our field, and avoid too many outside activities. Because this program is controlled by a separate organization one might feel that it falls outside our sphere of interest; but because the program directly affects the farming interests of our boys, it should very definitely be of concern to us. Let's face it.

Garden projects are usually difficult and laborious to supervise. Do you realize that this program attracts a boy to do a better job on his own than might otherwise be the case without these incentives? Again as a teacher to a teacher, this is a good chapter activity. All of it provides good classroom study, course ideas, and methods. One would have a hard time finding better marketing ideas to present to a class as a teaching unit.

Vocational education's contributions

(Continued from Page 28)

of personal responsibility for everything that relates to their personal welfare and to the effective operation of their school or class. They are encouraged and led to engage in group activities and to take considerate group action that capitalizes their individual capacities and abilities, and at the same time helps them to learn to modify what they do individually in the interest of the group as a whole. Such a concept if followed by those who are directly responsible for the development of a life adjustment education program would go far toward making such programs effectively alive.

School and Community Synonymous

5. Vocational education has led the way among all school programs in making the terms "the school" and "the community" synonymous. In fact, vocational education prospers largely to the extent that the community it is set up to serve really becomes the school. It becomes the school in the sense that the entire physical resources of the community became available for instructional purposes, sometimes by purchase, sometimes by rent, and sometimes by the good will of the individuals, institutions or organizations controlling them. The community becomes the school largely to the extent that the personal resources come to accept some responsibility for the attainment of high standards of educational accomplishment and increasingly make themselves available to the school officials and teachers for such help as they can render best. There is no community in which life adjustment education may finally come to be developed but what has within it the same great physical and personal resource that will need to be used if such a program is to function in the lives of the people it is set up to serve.

School to Life Transition Axiomatic

6. Finally, vocational education leads the student squarely into the middle of occupational situations. It begins with the boy when he is only old enough and big enough to own and manage and grow one pig and continues with him progressively as he advances toward the status of an owner-operator of a swine producing farm. This is generally characteristic of all vocational education and it clearly demonstrates the efficacies of the argument that education should lead its learners into fulltime attention and participation of the central and important life activities of the community in which they are growing into young manhood and young womanhood.

If, somehow or other, vocational education can set up a program for getting these things done, first among its own workers in the field of vocational education and, secondly, among general school officials both administrative and instructional it will have taken advantage of one of its finest opportunities to contribute to the American democratic concept of equal educational opportunities for all.

Studies and Investigations

E. B. KNIGHT

Trends in community fairs in Pennsylvania

N. D. STARNER, Teacher, Wyalusing, Pennsylvania



N. D. Starner

THE purpose of this study was to discover the recent trends in attendance, organization, and development of community fairs. One phase of the problem was to arrive at a proposal for organizing a com-

Based on the study of com-

munity fair.

munity fairs in Pennsylvania the following questions were considered: (1) What are the prevailing methods employed in organizing a community fair? (2) What kinds of committees are used? (3) How many committees are needed? (4) Who serves on the committees? (5) How the expenses are paid? (6) What type or types of awards are presented to winners? (7) What kind of entertainment is given? (8) What changes have occurred in attendance? (9) What instruction is being given for educational values? (10) What restrictions are made on exhibits entries at the fairs? and (11) What other items of a miscellaneous nature are employed by community fairs?

Procedure

In dealing with this problem of trends in community fairs in Pennsylvania, a questionnaire was mailed in July, 1946 to 271 teachers of vocational agriculture and 26 county supervisors located in Pennsylvania, A majority of the questions was of the check-list type. The selected questions were drawn up so as to secure as many answers as possible to the problem under study.

Of the 297 questionnaire forms that were sent out, 162 replies were received, a total of fifty-five per cent. Of these 162 replies, 43 per cent stated that they had conducted a community fair.

Community fairs in this study were classified as rural exhibitions, smaller in size than the county fairs, and in most cases a product of a school.

Conclusions

The data collected from the teachers reporting in this study indicated a noticeable trend in certain phases of the operation and organization of the community fairs in Pennsylvania. Frequency of occurrence and usage of certain items reported, support the following conclusions.

1. Community fairs throughout Pennsylvania were most frequently held for a three day period in September.

7. Most frequent types of committees employed were (in order of occurrence): publicity, entertainment, premium list, program, judging, arrangement, financial, refreshment, and parking.

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8. School teachers and students participated most frequently in committee work.

9. Most frequent methods of advertising employed were: newspapers, posters, entry lists, and booklets.

10. The greater the number of methods of advertising employed, the larger the attendance reported.

11. A majority of fairs reporting sold refreshments as a means of obtaining funds for the fair's operation.

12. Leading types of entertainment used at the fairs were: baseball games, band music, and motion pictures. A greater number of fairs used three types of entertainment.

13. The majority of the types of instruction given were: cattle judging contests, technical agricultural demonstrations, and poultry judging contests. A greater number of the fairs used one type of instruction.

14. Adults, high school, and grade school pupils competed in one class at most fairs.

15. Ribbons and money were the most frequent kinds of awards given. The (Continued on Page 47)

Helping boys choose occupational opportunities

CLARKE B. WOOD, Teacher, Falls Village, Connecticut

he should become

acquainted with

many vocations. The school and teach-

ers can help to provide such guidance.

Choice means selection and the selection

process becomes a concern of the school.

Aiding pupils in selection of the cur-

riculum in vocational agriculture is a

responsibility of the teacher in most

schools. It may be a joint responsibility

between the administrator and teacher,

or in a few schools the administrator

may make selection his responsibility

giving the pupil little to say in the

There is a need for improving the

selection process before and after the

pupils are enrolled. In my study in-

volving 387 pupils in Connecticut en-

rolled in vocational agriculture, I found

253 intended to farm, 76 intended to

enter an occupation related to agricul-

ture and 58 were undecided about farm-

ing or a related occupation. There was

little difference between students in the

first and fourth years in the percentage

²Wood, C. B. A Survey of Practices in the Selection and Admission of Prospective Pupils of Vocational Agriculture in Connecticut. Thesis, M.S. Cornell, 1947.



2. Attendance at fairs reported was

3. The school building and/or the

4. Community fairs are held pri-

5. The number of fairs receiving

6. A majority of the fairs were or-

ganized with the following officials:

president, vice-president, secretary, and

treasurer. Members of the school faculty

served most frequently as the president

marily for the benefit of school or com-

playground was the most likely place

highest during the month of August.

to hold a community fair.

state aid has been increasing.

C. B. Wood

matter.

democratic of pupils undecided about farming or A form of society a related occupation. How did pupils in Connecticut first has as one feature the choice of voca-

learn about vocational agriculture? The sources of first information reported by tion by the indithe greatest number of cases were vidual. Vocations friends and the teachers of vocational in our society toagriculture. Grade school teachers, regday are numerous, istration materials, occupational discusvaried and intersions in grade school classes, and mimedependent. The inographed materials about vocational dividual must make agriculture comprise a second source a vocational choice. group of lesser importance. To choose wisely

Pupils considered that the most useful sources were the teacher of vocational agriculture, pupils enrolled in vocational agriculture and farmers. The second most useful sources were mimeographed materials, Future Farmers of America, registration materials, and 4-H Club agents or leaders. The third most useful sources mere members of adult farmer classes, occupational discussions in the grade school, and grade school

The influence of friends is by far the most important factor in choice of a curriculum. Sixty-five per cent reported that friends aided in their choice. Fortyfour per cent of the pupils reported receiving aid from the teachers of vocational agriculture. Local farmers, printed materials, grade school teachers, and 4-H club experience were reported as other aids in choosing.

These facts imply a need for having friends of prospective pupils well informed. They have a great influence on prospective pupils. It is evident that better use of printed materials is necessary. Also, the grade school teachers must be informed about vocational agri-



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C. B. Wood and School Counselor and Parents talk with boy about his problem of educational and occupational choice.

45

How well informed were the pupils? About seventy per cent of the pupils received information about vocational agriculture. Fifty per cent felt they were well informed before entering the course. Pupils reporting that they intend to farm received more information than those reporting no intention to

The following practices were reported by teachers: (1) visits to prospective pupils, (2) advice given by teacher about curriculum choice, (3) contacts with 4-H club agents (4) use of printed material about vocational agriculture, (5) students of vocational agriculture contact eighth grade pupils, (6) talks presented to groups, (7) contacts with guidance officer in the school and (8) visits to eighth grade teachers to talk about prospective candidates.

Thirty-three per cent of the pupils stated that they were influenced by farmers, 27 per cent by grade school teachers and 22 per cent by 4-H club agent. One hundred and eighteen pupils first learned about vocational agriculture from farmers, 81 pupils first learned about it from grade school teachers and 70 pupils learned about it from 4-H club agents.

Instructors that contact farmers to discuss prospective candidates have a greater percentage of their pupils influenced in curriculum choice by farmers. The data imply a need of continuing and strengthening the various contacts.

Printed and mimeographed materials have been considered by a number of teachers as a means of aiding prospective pupils in their choice of a vocation. About one-fourth of the pupils report they were influenced by them. Fifty pupils first learned about vocational agriculture from the printed page, Fifty per cent of the instructors reported mimeographed or printed materials available to pupils. Thirty-five per cent of the administrators report having printed material available. Yet, only 28 per cent of the pupils reported seeing the material.

Seven schools submitted samples of their printed material. Three samples presented explained curricula which the school offered, three explained the vocational agriculture curriculum only and one was a fact finding questionnaire. The printed material about voca-

Occupations of North Carolina's American farmers

GERALD B. JAMES, Teacher, Millbrook, North Carolina



Gerald James

RESEARCH was the summer of 1947 to ascertain the occupations and distribution of the young men who received the Amerfarms. ican Farmer Degree in the North Carolina Association of the Future Farmers of America since Novem-

ber, 1928. More

specifically, the study was made with the view of ascertaining the number of North Carolina American Farmers who had become established in farming, and the number who were in related occupations or professions with reasons for their choices. Information on the extent to which those in farming have advanced toward farm ownership, including participation in community activities and leadership positions, was also sought,

Seventy-three of the 76 men who received the degree during the period of November, 1928 to July, 1947 were included in the study. Since the study included all of the American Farmers who received the degree before July, 1947, both new and old degree winners were contacted. Some were eighteen years of age while others were approaching forty. Such differences contributed largely to wide variations in occupational choices and the present status of the men.

Sitxy-three of the 73 American farmers were reared on farms where their parents were full-time farmers. Six others were reared in an agricultural community. Four young men came from non-farm homes.

The size of farms from which they came ranged from 12 to 950 total acres and from 7 to 700 cultivated acres. The cultivated and total acreages averaged 101.4 and 245.7 respectively. This is considerably larger than the 1945 state

*Mr. James' report is based on his thesis which was completed at North Carolina State College in 1948.

average of 64.8 total acres and 26.4 cropland acres. The majority of the home farms were tobacco or general farms. Dairy, apple orchard, truck and small grain farms followed in that order, Only 6 young men (8.2 per cent) came from rented farms. The others, with exceptions were from family owned

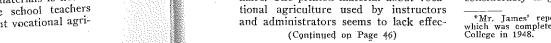
Fathers of American farmers varied in age from 37 to 70 years, the average age being 49 years, Mothers of American farmers averaged 46.5 years of age. American farmers came from families which had an average of 2.2 girls and 5.6 boys per family. Thirty-one and one-tenth per cent of these American farmers were the oldest child in the associated families.

Forty per cent of the American farmers were classified as being at home with an income from one or more enterprises at the time they received the degree. Eleven per cent were partners in the farm business at home. Twenty and one-tenth per cent were enrolled in agricultural colleges, while an additional 15.0 per cent were enrolled in non-agricultural schools and college at that time.

The occupational distribution in 1947 of the 73 American farmers showed 71.2 per cent in agriculture, 45.2 per cent of whom were in farming. Eleven per cent were in related occupations and 15.0 per cent were in agricultural colleges. The 28.8 per cent not in farming were classified as follows: 9.6 per cent in non-agricultural schools and colleges, 15.1 per cent in occupations not related to agriculture, and 4.1 per cent in the armed forces.

Approximately one-fourth (24.2 per cent) of the 33 American farmers in farming were owner-operators, 9.1 per cent were managers of farms for other parties, 27.3 per cent were partners in farm business at home, 30.3 per cent were at home with income from one or more enterprises, and 3.0 per cent were working for wages on the home

Twenty-eight of the 33 American farmers in farming were on the home (Continued on Page 46)



Occupations of North Carolina's American

farm, while the other five were an average distance of 29.2 miles from the home farm. Nine of the 19 not in farming lived on the home farm while 10 resided elsewhere. These 10 lived an average of 254.6 miles from their home farms.

Reasons for Not Farming

Personal preference for other work was given by 15 of the 40 American farmers not in farming as their reason for such a choice. Other reasons were as follows: Think it unwise to begin now (5); attending college (9); in the armed forces (3); and physically unable (2). Twenty-seven of the 40 not farming intended to farm in the future, while 10 stated that they did not plan to farm. Five of these 10 planned to follow occupations closely related to agriculture, one planned to teach vocational agriculture, while another expected to enter the field of veterinary medicine.

Schools and Colleges Attended

Forty-one of the 73 American farmers attended some school or college above high school level. Of this number, 63.5 per cent attended agricultural colleges, 17.1 per cent attended engineering colleges, 9.8 per cent pursued liberal arts courses, 7.3 per cent attended business or commercial schools, and only one man, or 2.4 per cent, attended a trade school.

Twelve of the 41 who attended colleges were graduated. One of the twelve went on to get a Master of Science degree and six others were currently working toward masters degrees. Nine of the above 12 were graduated from agricultural colleges. The one who received the Master of Science degree and five of those working toward the Master of Science degree were in agricultural fields.

American farmers were found to be active in their communities and had filled numerous leadership positions. Several had been leaders in civic organizations, but the majority of their leadership positions were and had been in local and county agricultural affairs, church organizations, and college extracurricular activities.

Conclusion

The data of this study show that 45.2 per cent of the young men who received the American Farmer degree in North Carolina were engaged in farming. This is consistent with the findings of other investigators in similar studies of state farmer degree winners but slightly less than the percentage shown by three national studies of former all-day students who received one or more years of instruction in vocational agriculture. These three national studies. however, were made between the years of 1917 and 1932, at which time a considerably larger percentage of the total population of the nation was in agriculture than at present.

Just how long these American farmers will engage in farming is a question which can be answered only after years of continuous follow-up of these young men.

men.
From the data presented, only 10 of the 73 American farmers do not plan



Farm home and grounds of Norman Corriber, China Grove, North Carolina, who received his American Farmer degree in 1932.

to farm in the future and two others are undecided. However five of these 10 plan to enter occupations related to farming. This seems to lead to the conclusion that the percentage in farming and related occupations will increase greatly as some of those now in college drop out or are graduated.

This study also reveals that the percentage in occupations related to farming is about the same as the percentage found in related occupations in five studies of State Farmer degree winners in other states, but much higher than the percentage shown in the three carlier studies on national basis of former students not holding the State Farmer or American Farmer degree.

There is also a close correlation between the percentage who attended agricultural colleges in this study and the corresponding percentage in the five studies of State Farmers degree winners. These percentages are much higher, however, than the percentages shown in the three national studies of former students not holding either the State or American Farmer degree.

The data brought out in this study indicate that American and State Farmer degree winners attend agricultural colleges and enter related occupations in greater proportions than young men not holding either degree.

Despite the fact that American and State Farmer degree winners enter related occupations and attend agricultural colleges in much larger proportions than former students of vocational agriculture not holding either of these degrees, the percentages in agriculture for all studies reviewed are very nearly the same.

It appears from this and other studies that the Future Farmers of America organization as set forth in the official F.F.A. manual envelops both the development of competent, aggressive, rural and agricultural leadership, and the establishment of its members in farming. As to which of these two the organization is more interested in working toward is not known, nor was it the purpose of this study to ascertain this fact. However, the organization would do well to take cognizance of these data.

Helping boys choose occupational opportunities (Continued from Page 45)

tiveness as a device for imparting information to prospective pupils.

Visiting prospective pupils was carried out by many teachers. Thirty-five per cent of the administrators expected their teachers to visit prospective pupils. Eighty-eight per cent of the instructors reporting visited prospective pupils, yet only thirty-five per cent of the pupils reported they were visited before entering school. Slightly more pupils who have decided to farm were visited than those who were undecided. There was a great variation in the proportion of pupils visited, a range of ten to eighty-two per cent being found.

One hundred and five out of 387 pupils changed from other high school curricula to vocational agriculture. Nearly one-half of the 58 pupils undecided about farming as a vocation were in the group that made the change. One-fourth of the pupils in the group intending to farm made a change. Pupils reported they were influenced to make changes by friends, students in vocational agriculture, study of occupations,

4-H club leaders and the guidance officer of the school. School personnel had less influence in the change than the factors outside of the school.

We may summarize by asking a number of questions. Based on experience and evidence reported it would seem that more attention should be given to these techniques.

1. Do we work closely with the guidance officer of our school?

2. Do we contact, and explain vocational agriculture to eighth grade teachers and work with them in guiding pupils?

B. Do we locate all prospective pupils in the area?

4. Do we visit all prospective pupils before school opens?

5. Do we secure necessary information and help pupils carry the selection process to a satisfactory conclusion?

6. Do we work with the administrators to prepare effective printed materials and provide for their distribution to pupils before and after entering high school?

 Do we have pupils enrolled in vocational agriculture visit prospective pupils?

Make courses practical

LESLIE J. VAN ETTEN, Instructor, Western Illinois State College, Macomb, Illinois

THE AGRICULTURAL EDUCATION MAGAZINE, August, 1949

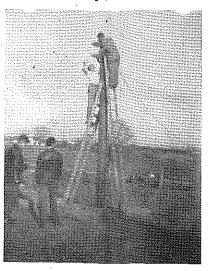
HIGH SCHOOL and college students enjoy practical courses. Many present-day courses could be made more practical with the replanning and reorganizing of course content and of teaching methods. Any ambitious instructor can do much to increase the utilitarian value of any course regardless of whether it is in the field of English, mathematics, science, or agriculture.

Rural electrification is expanding rapidly. Several hundred miles of electric power lines have been built in the area served by Western Illinois State College during the past two years. The farm families served by these lines need to have instruction in the proper and best use of electricity. Therefore, during the summer of 1948 the staff of the agriculture department in that college decided to offer a course in rural electrification. There was some discussion as to the proper content of such a course. Outlines of similar courses offered in other colleges and universities were obtained and reviewed. Some seemed to consist chiefly of theory, while others seemed more practical. Some were general; others were more detailed and specific. A decision was reached to make this course as useful as possible to young men who were enrolled as agriculture majors in our college.

A survey was made among the farming communities to help determine what units should be included in the course outline. The instructor talked with various farm leaders and rural electrification administration personnel in order to learn what information and skills were most needed by farm people. From these sources and from the writer's personal observations and his farm background the course was planned.

During the survey it was found that very few farms were wired completely when electricity was first brought to the farmstead. Therefore, the farmer was continually needing to have electricity extended to additional outbuildings, (barn, garage, hog house, poultry house, and others) and the farmer's wife was discovering that she needed certain switches and additional outlets or lights installed here and there about the farm home in order to make her work more convenient. New clectrical equipment was being purchased, and many times this meant an extension to the wiring system, Appliances were often needing minor adjustments and repairs.

The course was designed to meet these needs by teaching the skills and the knowledge necessary to wire houses and farm outbuildings properly for electricity. It taught the proper wiring methods, systems, skills, and code interpretations for doing such wiring. Also included in the course were minor units on the proper care, use, and installation of small electric appliances and motors which are commonly found in and around the farm home.



Students installing pole light and three-way switch

The old saying "Doing is learning" has been proved true many times. The writer is in accord with that motto. Therefore, the young men taking the electrification course were asked actually to wire some building or project as a part of their training. During the past year one class wired a large poultry house (80 ft. by 20 ft.), and the other class wired the farm and machine shop building, both buildings being college property. The wiring was complete including entrance service, fuse and switch boxes, receptacles, lamps, duplex outlets, and outside pole light, and 3-way switches.

Some instructors and students object to "learning by doing" (actual experience) because it often results in soiled hands and clothing. It is also inconvenient to transfer the classroom to the farm or some other location as might be necessary on some occasions. However, the writer maintains that this type of teaching gives most excellent results. He has used this combined theory and practical applied experience method in many courses both in high school and in college work and he highly recommends that it be applied more universally.

Trends in school fairs

(Continued from Page 44) majority of the fairs gave two different kinds of awards; that is, money and ribbons.

16. The highest total attendance reported at any one fair was 30,000 persons

17. Grouped in order of their frequency the classes of exhibits were: vegetable, farm crops, chickens, flowers, dairy cows, and F.F.A. exhibits. A total of 35,315 exhibits were placed at the fairs reporting, or an average of 504.5 per fair.

18. At a majority of the fairs, entry privileges were limited to residents of the community, residents of the county, and residents of other counties.

19. The five leading items of expense

were: prizes, refreshments, printing, entertainment, lumber and nails, and labor

20. The highest total fair expenses reported was \$14,143 while the highest income reported was \$14,354.

21. The majority of the programs met the approval of the teacher of agriculture.

Recommendations

The succeeding suggestions for the organization of a community fair are formulted from the study data and also from opinions of teachers having experience in organizing fairs.

- 1. Create a definite interest for a community fair among the people of the community by discussing at public meetings operating expenses, methods of raising funds, purposes, and location of the fair.
- 2. When the people of the community express a desire for an organized community fair, it would be justifiable to call a meeting of all people in the community. Advertise this meeting through such mediums as newspapers, posters, and letters to various organizations.
- 3. At this meeting organize the fair as follows:
- a. Officers president, vice-president, secretary, and treasurer.
- b. Committees publicity, entertainment, premium list, program, judging, arrangement, financial, and refreshment. Other committees should be set up as the need arises.
- 4. Responsibilities of each officer and each committee should be discussed.
- 5. Schedule fair in September for three days.
- 6. Where possible, hold the fair at the school and/or playground.
- 7. Use three or more methods of advertising the fair. Such mediums as newspapers, posters, entry lists, booklets, radio, letters, circulars, post cards, and telephone should be employed.
- 8. Sell refreshments, solicit funds and donations, sell food, sell ads in fair catalog, sell exhibits, and have entertainment features during the fair to obtain funds for its operation.
- 9. Have a variety of entertainment. Such entertainments as baseball games, foot races, mushball games, track, band and vocal music, motion pictures, plays, and parades are valuable.
- 10. Such educational instruction as cattle judging contests, technical agricultural demonstrations, poultry judging contests, educational charts, talks and lectures, and cooking demonstrations should be used.
- 11. Have adults, high school pupils, and grade school pupils compete in one class, except in judging contests.
- 12. Give ribbons and money as awards to exhibitors and contestants.
- 13. Vegetables, farm crops, chickens, flowers, dairy cows, and F.F.A. exhibits make up the greater share of the exhibits. Give adequate space to livestock, farm machinery, and farm crops.
- 14. Do not permit entries of animals and agricultural produce not owned or grown by exhibitors.
- 15. Do not limit entry privileges to F.F.A. members, to school boys and girls, to residents of the community, or to residents of the county.

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    W. Gregory—Ass't Commissioner for Vocational Education
    W. T. Spanton—Chief, Agricultural Education
    D. M. Clements—Ass't Chief, Agricultural Education

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as—E. W. Holmes, Oxford
as—V. P. Winstead, Morton
as—T. V. Majure, Utica
as—A. E. Strain, Long Beach
t—V. G. Martin, State College
t—J. F. Scoggin, State College
t—O. L. Snowden, State College
as—A. E. Strain, State College
Nt—A. D. Foibs, Alcoru
Nt—A. G. Gordon, Alcorn
Nt—R. H. Derden, Alcoru
MONTANA
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ds—W. M. Mahony, Honea Path
ds—W. R. Carter, Walterboro
ds—F. L. Barton, Chester
ds—C. G. Zimmerman, Florence
t—J. B. Monroe, Clemson
t—B. H. Stribling, Clemson
t—F. E. Kirkley, Clemson
t—W. C. Bowen, Clemson
t—T. A. White, Clemson
Nt—Gabe Buckman, Orangeburg
Nt—K. M. Keyes, Orangeburg
SOUTH DAKOTA
d—H. S. Freeman, Pierre
s—H. E. Urton, Pierre
t—Stanley Sundet, Brookings
TENNESSEE
Specialists:
H. B. Swanson—Teacher Training
A. H. Hollenberg—Farm Mcchanics
E. J. Johnson—Program Planning
R. E. Naugher—Part-Time and Evening
A. W. Tenney—Subject Matter
W. N. Elam—Program Planning
d—directors s—supervisors as—assistant supervisors rs—regional supervisors ds—district supervisors FFA—specialist FFA t—teacher trainers it—itinerant teacher trainers rt—research workers Nt—Negro teacher trainers sms—subject matter specialists fms—farm mechanics specialists
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              t—R. H. Derden, Alcorn
MONTANA
d—Ralph Kenek, Bozeman
s—A. W. Johnson, Bozeman
as—Arthur B. Ward, Bozeman
t—R. H. Palmer, Bozeman
t—H. E. Rodeberg, Bozeman
NEBRASKA
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ds—G. E. Freeman, Nashville
as—J. W. Brimm. Nashville
as—J. W. Brimm. Nashville
as—J. W. Carney, Nashville
as—J. W. Carney, Nashville
as—S. L. Sparks, Nashville
ds—H. N. Parks, Gallatin
ds—L. A. Carpenter, Knoxville
ds—H. C. Colvett, Jackson
t—N. E. Fitzgerald, Knoxville
t—B. S. Wilson, Knoxville
t—B. S. Wilson, Knoxville
t—R. W. Beamer, Knoxville
t—M. M. Clendenon, Knoxville
sms—A. J. Paulus, Knoxville
t—E. B. Knight, Knoxville
nt—H. L. Taylor, Nashville
Nt—W. A. Flowers, Nashville
Nt—W. A. Flowers, Nashville
Nt—W. A. Flowers, Nashville
TEXAS
d—W. E. Lowry, Austin
as—R. Lano Barron, Austin
as—R. Lano Barron, Austin
as—G. T. Ryan, Lubbook
rs—Vanny Stewart, Commerce
rs—C. D. Parker, Kingsville
rs—A. B. Childers, Mart
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ds—J. L. Samuel, Arlington
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ds—J. A. Marshall, Nacogloches
ds—T. R. Rhodes, Huntaville
t—E. R. Alexander, College Station
t—H. W. Mellroy, College Station
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t—J. L. Leach, Lubbock
t—S. V. Burks, Kingsville
tt—Ray L. Chappelle, Lubbock
t—T. L. Leach, Lubbock
t—S. V. Burks, Kingsville
it—E. W. Morrison, Huntaville
it—F. W. Melroy, Frairie View
Nt—C. J. Thomas, Prairie View
Nt—C. J. Thomas, Prairie View
Nt—E. E. Collius, Fxarkana
Nit—S. E. Palmer, Tyler
Nit—Gus Jones, Caldwell
Nit—Wardell Thompson, Prairie View
Nit—E. M. Rhotinson, Huntaville
it—Fau M. Robinson, Prairie View
Nit—E. E. Collius, Fxarkana
Nit—S. E. Palmer, Tyler
Nit—Gus Jones, Caldwell
Nit—Wardell Thompson, Prairie View
Nit—E. M. Rhorision, Salt Lake City
as—Elvin Downs, Logan
  Note—Please report changes in personnel for this directory to Dr. W. T. Spanton, Chief, Agricultural Education, U. S. Office of Education.
                                                                                                                                                                                                                                                                                                                                                                                       ation, U. S. Office of Educatio

as—A. J. Andrews, Springfield

as—H. M. Strubinger, Springfield

as—H. W. Prototor, Springfield

as—H. R. Damisch, Springfield

as—H. R. Damisch, Springfield

t—H. M. Hamlin, Urbana

t—J. D. Weiss, Urbana

t—J. N. Weiss, Urbana

t—L. J. Phipps, Urbana

sms—Melvin Henderson, Urbana

sms—Melvin Henderson, Urbana

sms—H. J. Rueker, Urbana

INDIANA

d—Deane E. Walker, Indianapolis

s—H. B. Taylor, Indianapolis

t—B. C. Lawson, Lafayette

t—Rabh Bentley, Lafayette

it—E. K. W. Kiltz, Lafayette

it—E. Clanin, Lafayette

it—E. Clanin, Lafayette
              ALABAMA

d—R. E. Cammack, Montgomery
s—J. C. Caanon, Montgomery
as—J. L. Datley, Montgomery
as—L. I. Sellers, Auburn
as—H. F. Gibson, Auburn
as—H. R. Culver, Auburn
as—B. P. Dilworth, Auburn
t—S. L. Chesnutt, Auburn
t—S. L. Chesnutt, Auburn
t—B. W. Montgomery, Auburn
t—D. N. Bottoms, Auburn
t—W. A. Broyles, Auburn
t—W. A. Broyles, Auburn
t—W. A. Broyles, Auburn
Nt—Arthur Floyd, Tuskegee
Nt—F. T. McQueen, Tuskegee
Nt—F. T. McQueen, Tuskegee
Nt—E. L. Donald, Tuskegee
ARIZONA
d-s—J. R. Cullison, Phoenix
                                                                  ALABAMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NEBRASKA
d-G. F. Liebendorfer, Lincom
s-L. D. Clements, Lincoln
as-H. W. Ocems, Jancoln
t-C. E. Rhoad, Lincoln
t-C. C. Minteer, Lincoln
fms-M. G. McCreight, Lincoln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -M. G. McCreight, Lincoln
NEVADA
-Douald C. Cameron, Carson City
-John W. Bunton, Carson City
NEW HAMPSHIRE
-Walter M. May, Concord
-Earl H. Little, Concord
-Philip S. Barton, Durham
NEW JERSEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NEW. JERSEY
d—John.A. McCarthy, Trenton
s-t—H. O. Sampson, New Brunswick
as-t—O. E. Kiese, New Brunswick
as-t—W. H. Evans, New Brunswick
NEW MEXICO
s—I. C. Dalton, State College
t—Carl G. Howard, State College
as—J. L. Perrin, State College
ARIZONA
d-s—J. R. Cullison, Phoenix
t—R. W. Cline, Tucson
t—W. A. Schafer, Tucson
ARKANSAS
d—J. M. Adams, Little Rock
a—C. R. Wilkey, Little Rock
da—G. R. Wilkey, Little Rock
ds—G. D. Mitchell, Little Rock
ds—G. A. White, Monticello
ds—O. J. Seymour, Arkadelphia
ds—J. A. Niven, Russellville
ds—George Sullards, Jonesboro
t—Roy W. Roberts, Fayetteville
t—LaVan Shoptaw, Fayetteville
t—LaVan Shoptaw, Fayetteville
Nt—L. R. Gaines, Pine Bluff
at—A. G. Kirby, Pine Bluff
at—A. G. Kirby, Pine Bluff
GALIFORNIA
d—Wesley P. Smith, Sacramento
s—B. J. Memåhon, San Luis Obispo
rs—B. R. Denbigh, Los Angeles
r3—Howard F. Chappell, Sacramento
1s—A. G. Rinn, Fresno
rs—J. C. Gibson, Los Angeles
r3—Howard F. Chappell, Sacramento
rs—J. Everett Walker, Chico
t—S. S. Sutherland, Davis
t—E. M. Juergenson, Davis
t—E. M. Juergenson, Davis
t—E. M. Juergenson, Davis
t—E. M. Juergenson, San Luis Obispo
sms—Goo. P. Couper, San Luis Obispo
sms—Goo. P. Couper, San Luis Obispo
sms—John D. Lawson, San Luis Obispo
cOLORADO
d—E. C. Comstock, Denver
as—Irwin C. Elliott, Denver
t—R. W. Canada, Ft. Collins
converticut
d—Emmett O'Brien, Hartford
s—R. L. Hahn, Hartford
t—W. Howard Martin, Storrs
DELAWARE
d—R. W. Heim, Newark
s—W. L. Mowlds, Dover
t—Paul M. Hodgson, Newark
Nt—Wm. R. Wyndor, Dover
FLORIDA
d—T. D. Bailey, Tallahassee
s—Harry Wood, Tallahassee
s—H. A. Marshall, Tallabassee
s—H. A. Marshall, Tallaba
                                                                                                                                                                                                                                                                                                                                                                                                   it—E. E. Clanin, Lafayette
IOWA
s—H. T. Hall, Des Moines
as—M. Z. Hendren, Des Moines
as—G. F. Barton, Des Moines
t—Barton Morgan, Ames
t—John B. McCleiland, Ames
t—J. A. Starrak, Ames
t—T. E. Sexaner, Ames
t—C. F. Bundy, Ames
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              us—J. L. Perrin, State College

NEW YORK

d—A. K. Getman, Albany
s—R. C. S. Sutilif, Albany
(ncting)
as—J. W. Weaver, Albany
as—J. W. Hatch, Albany
as—A. E. Champlin, Alfred
t—Roy A. Olney, Ithaca
t—W. A. Smith, Ithaca
t—W. R. Kunsela, Ithaca
                                                                                                                                                                                                                                                                                                                                                                                                                            -C. F. Bundy, Ames
KANSAS
-C. M. Miller, Topeka
-L. B. Pollom, Topeka
-A. P. Davidson, Manhattan
-H. E. Kugler
-L. F. Hall, Manhattan
-Loren Whipps, Manhattan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 t-W. R. Kunseln. Ithaca

NORTH CAROLINA
d-J. W. Smith, Raloigh
s-Roy H. Thomas, Raleigh
s-Roy H. Thomas, Raleigh
ds-E. N. Meckins, Raloigh
ds-J. M. Osteen, Rockingham
ds-T. H. Stafford, Asheville
ds-T. B. Elliott, Woodland
ds-N. B. Chesautt, Whiteville
t-Leon E. Cook, Raleigh
t-L. O. Armstrong, Raleigh
t-J. K. Coggin, Raleigh
t-F. A. Nylund, Raleigh
Nt-S. B. Simmons, Greensboro
Nt-C. E. Dean, Greensboro
NORTH DAKOTA
                                                                                                                                                                                                                                                                                                                                                                                             KENTUCKY
d—Watson Armstrong, Frankfort
s.—E. P. Hilton, Frankfort
as—B. G. Moore, Frankfort
as—S. S. Wilson, Frankfort
as—Floyd Cox, Lexington
as—W. C. Montgomery, Frankfort
t—Carsie Hammonds, Lexington
t—W. R. Tabb, Lexington
t—Stanley Wall, Lexington
Nt—P. J. Manly, Frankfort
                                                                                                                                                                                                                                                                                                                                                                                                                                          KENTUCKY
                                                                                                                                                                                                                                                                                                                                                                              Nt—P. J. Manly, Frankfort

LOUISIANA

d — J. R. Gamble, Baton Rouge
s—W. J. Parent, Baton Rouge
da—I. N. Carpenter, Baton Rouge
ds—C. P. MeVea, Baton Rouge
ds—Gordon Canterbury, Baton Rouge
FFA—Delmar Walker, Baton Rouge
fins—Curtis Jacobs, Baton Rouge
Nit—M. J. Clark, Baton Rouge
Nit—M. J. Clark, Baton Rouge
Nit—E. C. Wright, Baton Rouge
t—A. Larriviere, Lafayette
t—A. A. LoBlanc, Lafayette
t—Roy L. Dayenport, University
t—Malcolin C. Gaar, University
t—J. C. Floyd, University
t—Harry J. Braud, University
t—Harry J. Braud, University
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NORTH DAKOTA
d—E. F. Riley, Wahpeton
s-t—Ernest L. DeAlton, Fargo
as-t—Shubel D. Owen, Fargo
as-t—Winston H. Dolve, Fargo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    us-t—Winston H. Dolve, Farge
OHIO

d—J. R. Strobel, Columbus
s—Ralph A. Howard, Columbus
sa-W. G. Weiler, Columbus
ds—E. O. Bolender, Columbus
ds—F. J. Ruble, Columbus
ds—D. R. Purkey, Columbus
t—Ralph E. Bender, Columbus
t—W. F. Stewart, Columbus
t—Harold G. Kenestrick, Columbus
t—Harold G. Kenestrick, Columbus
t—R. J. Woodin, Columbus
to—R. J. Woodin, Columbus
to—R. J. Woodin, Columbus
ct—Ray Fife, Columbus
OKI AHOMA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d.—John E. Nelson, Montpelier

s.—C. D. Watson, Burlington

as.—H. R. Cushman, Burlington

t.—James E. Woodhull, Burlington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        as III. Learnes E. Woodhull, Burlington
VIRGINIA
d—Richard N. Anderson, Richmond
s—F. B. Cale, Richmond
as—R. E. Bass, Richmond
t—E. G. Thompson, Blacksburg
as—T. V. Downing, (Forestry), Ivor
ds—W. R. Emmons, Boykins
ds—J. O. Hoge, Blacksburg
ds—W. R. Legge, Winchester
ds—J. C. Green, Powhatan
ds—W. C. Dudley, Appomattox
ds—J. A. Hardy, Pulaski
N-ds—C. B. Jetter, Martinsville
t—II. W. Sanders, Blacksburg
t—C. E. Richard, Blacksburg
t—C. E. McLaron, Blacksburg
t—C. S. McLaron, Blacksburg
t—B. C. Bass, Blacksburg
fins—T. J. Wakeman, Blacksburg
Nt—J. R. Thomas, Petersburg
Nt—W. A. Fields, Potersburg
WASHINGTON
                                                                                                                                                                                                                                                                                                                                                                                                           MAINE
d—Morris P. Cates, Augusta
s—John A. Snell, Augusta
s-t-Wallace H. Elliott, Orono
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                t-Ray Fife, Columbus
OKLAHOMA

-s-J. B. Porky, Stillwater
as-W. R. Felton, Stillwater
ds-Byrle Killian, Stillwater
ds-Hugh D. Jones, Stillwater
ds-Cleo A. Collins, Stillwater
ds-Benton F. Thomason, Stillwater
f-A-Tom Daniel, Stillwater
t-C. L. Angerer, Stillwater
t-Don M. Orr, Stillwater
t-Chris White, Stillwater
Nit-D. C. Jones, Langston
OREGON
                                                                                                                                                                                                                                                                                                                                                                                                                                      MARYLAND
                                                                                                                                                                                                                                                                                                                                                                                               MARYLAND
d—John J. Scidel, Baltimore
s—Harry M. MacDonald, Baltimore
t—Arthur M. Ahalt, College Park
Nt—Claud C. Marion, Princess Anne
                                                                                                                                                                                                                                                                                                                                                                                                                                        MASSACHUSETTS
                                                                                                                                                                                                                                                                                                                                                                                                                              -M. Norcross Stratton, Boston

-John G. Glavin, Boston

-Jesse A. Taft, Amberst

-Charles F. Oliver, Amberst
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d—H. G. Halstead, Olympia
s—Bert L. Brown, Olympia
as—M. C. Knox, Olympia
as—H. M. Olsen, Olympia
as—J. W. Evans, Olympia
as-t—E. M. Webb, Pullman
as-t—Oscar Lorcen, Pullman
fms—Dave Hartzog, Pullman
WEST VIRGINIA
d—John M. Lowe, Charlesto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d—O. I. Paulson, Salem

s—Ralph L. Morgan, Salem

t—H. H. Gibson, Corvallis

t—Henry Ten Pas, Corvallis
                                                                                                                                                                                                                                                                                                                                                                                                                                      MICHIGAN
                                                                                                                                                                                                                                                                                                                                                                                                                          MIGHIGAN

Raiph C. Wenrich, Lansing

Harry E. Nesman, Lansing

Luke H. Kelley, Lansing

Raymond M. Clark, Lansing

E. A. Lightfoot, Lansing

H. M. Byram, East Lansing

H. Paul Sweany, East Lansing

Guy Timmons, East Lansing

Manufacture
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d.—Paul I., Cressman, Harrisburg
s.—H. C. Fetterolf, Harrisburg
13.—V. A. Martin, Harrisburg
t.—Honry S. Brunner, State College
t.—William F. Hall, State College
t.—C. S. Anderson, State College
t.—David R. McClay, State College
t.—Glenn Z. Stevens, State College
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WEST VIRGINIA

—John M. Lowe, Charleston

s—H. N. Hansucker, Charleston

as—S. D. McMillen, Charleston

t—D. W. Parsons, Morgantown

t—R. C. Butler, Morgantown

Nt—W. T. Johnson, Institute
                                                                                                                                                                                                                                                                                                                                                                                                         MINNESOTA
d.—Harry C. Schmidt, St. Paul
s.—G. R. Cochran, St. Paul
sas—W. J. Kortesmaki, St. Paul
t.—M. J. Peterson, St. Paul
t.—H. W. Kitts, St. Paul
t.—W. T. Bjoraker, St. Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -Glenn Z. Stevens, State College
PUERTO RICO

- L. Garcia Hernandez, San Juan (on leave
- Samuel Molinary, San Juan (on leave
- Samuel Molinary, San Juan (acting)
- Rafael Muller, San Juan
- Juan Acosta Henriquez, San Juan
- Frederico Carbonell, San Juan
- Juan Melendez, Cayey
- Gregorio Mendez, Arecibo
- Nicolas Hernandez, Aquadila
- Juan Robles, Mayagues
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d-William Kerr, Boise
s-Stanley S. Richardson, Boise
s-E. L. Lovell, Pocatello
t-H. A. Winner, Moscow
t-Dwight L. Kindschy, Moscow
ill.LINOIS
d-Ernest J. Simon, Springfield
s-J. E. Hill, Springfield
as-J. B. Adams, Springfield
                                                                                                                                                                                                                                                                                                                                                                                                                                      MISSOURI
                                                                                                                                                                                                                                                                                                                                                                                                                 MISSOURI
d—Traoy Dale, Jefferson City
s—C. M. Humphrey, Jefferson City
s—J. A. Bailey, Jefferson City
s—J. N. Freeman, Jefferson City
s—Joe Moore, Mt. Vernon
t—G. F. Ekstrom, Columbia
t—C. V. Roderick, Columbia
s—Joe Duck, Columbia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RHODE ISLAND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      st-Everett L. Austin, Providence
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